SETTING THE RIGHT COURSE FOR ECONOMIC POLICY

This is a translated version of the original German-language chapter "Vor wichtigen wirtschaftspolitischen Weichenstellungen", which is the sole authoritative text. Please cite the original German-language chapter if any reference is made to this text.

I. SETTING THE RIGHT COURSE FOR ECONOMIC POLICY

1. The German economy is maintaining one of its longest upswings in the post-war period. Simultaneously, it faces a number of major challenges. These relate, on the one hand, to the worldwide trend towards a departure from the **multilateral global economic order**, which hits Europe at a time when it is already weakened by Brexit and the growing importance of eurosceptic voices. However, Europe can best master these international developments collectively.

   On the other hand, they raise the question of the German economy's **future viability** in light of major structural changes, which is especially important given the rapidly proceeding **demographic change**. Permitting swift structural change in the course of **digitalisation**, could help to master national challenges. This requires determined economic policy decisions.

2. In the face of these big challenges, the Federal Government is not approaching the necessary reforms courageously enough and moves in some key areas, like pension reform, even into the wrong direction. In other areas, like digitalisation, it lets opportunities pass by. Furthermore, it does not sufficiently advocate a European approach, where this is advisable, like with climate or asylum policy. Regarding the development of the European Monetary Union, it runs into danger to lose sight of decisive principles like the unity of liability and control.

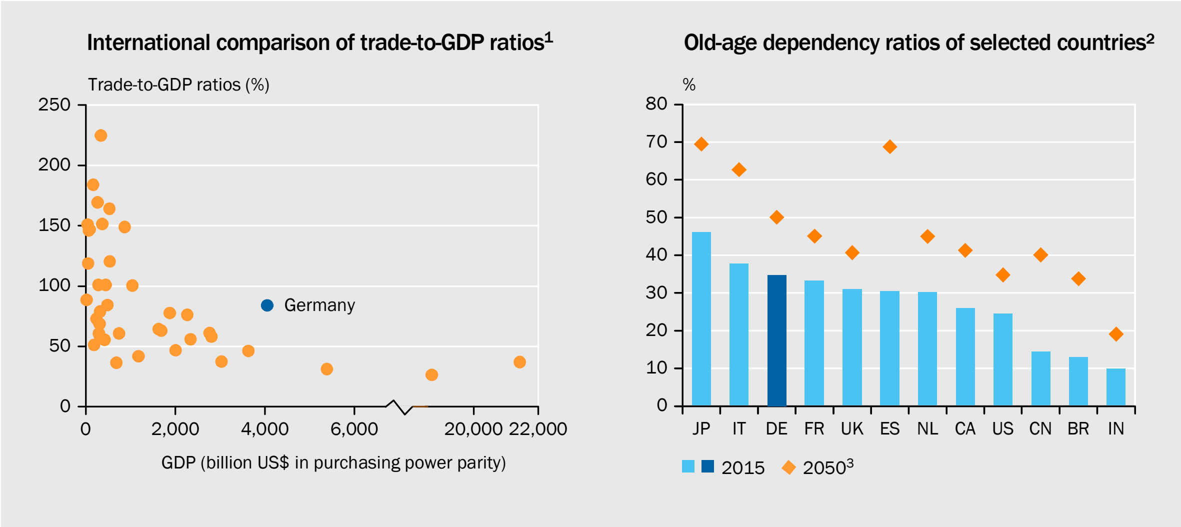
   Economic policymakers should take advantage of the favourable economic situation to strengthen the German economy's **framework conditions** and create some **leeway** for addressing new challenges that may arise, as a means of ensuring long-term prosperity. It should, however, refrain from an interventionist industrial policy.

Global multilateralism and European integration

3. The German economy is the most open among the major economies. ↘ CHART 1 LEFT **International trade** and globalisation contribute a great deal to German and global prosperity (GCEE Annual Report 2017 items 629 ff.). However, the US government's imposition of **tariffs** and the retaliation by its trading partners are reviving protectionist trends after decades of liberalisation. The United States has been driving this development, with its **withdrawal from multilateral agreements**, like those relating to the World Trade Organisation (WTO) and the Paris climate accord. Trade and capital flows are also affected by **tax reforms** – particularly in the United States; these change the international framework and enhance tax competition.

4. Germany can only effectively address many challenges through a joint effort with its partners in the **European Union** (EU). The EU not only has been a guarantor of peace for over 70 years. By pooling the political and economic weight of its member states, the EU provides the power needed for international

↘ CHART 1
Trade openness and demographic change in international comparison



1 – Sum of exports and imports as a percentage of a country's GDP. As of: 2016. 2 – Ratio of over-65s to the population between 20 and 64. JP-Japan, IT-Italy, DE-Germany, FR-France, UK-United Kingdom, ES-Spain, NL-Netherlands, CA-Canada, US-United States, CN-China, BR-Brazil, IN-India. 3 – UN estimates.

Sources: OECD, UN, own calculations

negotiations. Germany is particularly strongly linked to the other EU member states. As a result of **Brexit**, however, the European Union will lose an important member at the beginning of 2019. This will be the first time that the process of European integration is reversed after decades of expansion. At the same time, the government of **Italy** is openly questioning the rules of the European Monetary Union. This poses great challenges to European institutions and collaboration in Europe.

Demographic change and digitalisation

5. Germany will be one of the countries most heavily exposed to **demographic change** in the decades to come. ↘ CHART 1 RIGHT The nearing end of the "demographic pause" will put social security systems increasingly to the test. Nevertheless, political decisions are currently made that will further adversely affect the sustainability of these systems. Instead, growth-friendly tax reforms, a sustainable structure for the pension, healthcare and transfer systems and an economically efficient energy transition would be advisable. The current phase of a long economic upswing and a "demographic pause" **have created good conditions for reforms**, which could strengthen growth and sustainability, already for quite some time. The Federal Government runs into danger of missing this opportunity.

6. Due to a declining labour force, Germany will have to depend on dynamic productivity growth to ensure prosperity. Further advances in **digitalisation** could open up great potential in this regard and contribute to tackling the looming shortage of skilled staff. This requires adequate conditions. The opportunities offered by digitalisation probably outweigh the associated risks. Both globalisation and digitalisation create prosperity. This, however, requires a comprehensive **structural change**, for which considerable adjustments are

imperative. It would be wrong to react to this with short-sighted protective measures. Instead **people** should be better **empowered** to embrace the opportunities inherent in change on their own initiative.

Germany has successfully mastered structural change in past decades. This was largely due to an economic order that has the social market economy at its core. If Germany strikes the right **balance between personal initiative and social security**, it can continue to successfully drive change and seize the opportunities this presents. German policy should not question central elements of this economic order – such as personal initiative and competition – even with the wide range of new challenges. In such a situation, budging to the demand for industrial policy interventions is the wrong way to go.

II. GLOBALISATION: PREVENTING PROTECTIONISM, ACTING MULTILATERALLY

7. The **United States' withdrawal from multilateral organisations and agreements** – such as the WTO and the Paris Agreement – has been apparent since US President Trump took office. The international community suffers welfare losses from unilateral national actions, particularly in international trade and global climate protection. The United States has also embarked on a new path with taxation, which could result in a redirection of capital flows and reactions from other countries. Germany would be well-advised to take this as an opportunity to accept the tax competition and reform its tax system.

1. Further liberalisation instead of protectionism

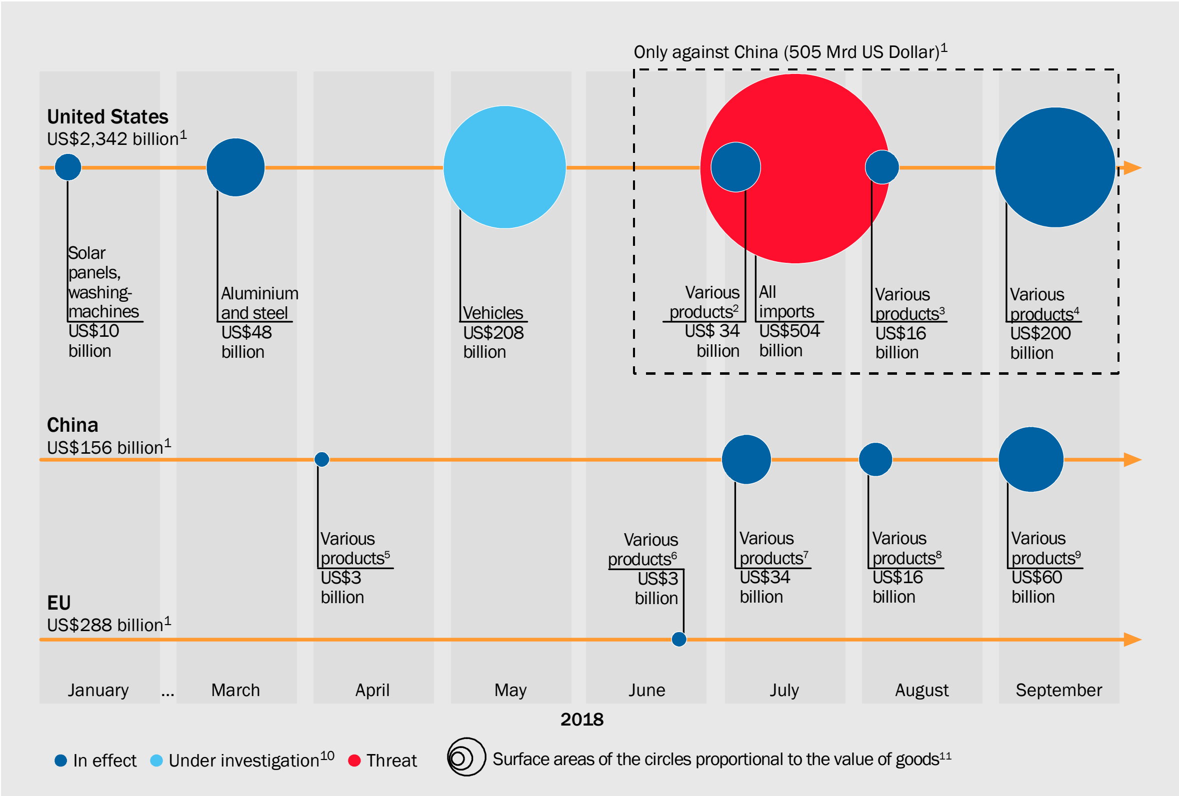
8. The number of **restrictive trade measures** implemented by WTO members and the trade volume they affect have **risen** further in the past year (WTO, 2018a). The United States' tariff increase is a dramatic example of this trend towards greater protectionism. ↘ CHART 2

The measures taken by the United States so far, and the retaliation by trading partners, have already **markedly increased average duty rates**. If the United States introduces the threatened tariffs on cars and follows through on its threats to China, this would significantly boost this increase. The trading volumes affected would be far greater than those affected by tariff hikes imposed to date. An escalation of the trade conflict represents a major risk for the further development of the world economy. ↘ ITEMS 207 FF.

9. The bilateral tariff increases are likely to be associated with **negative welfare effects** on the economies involved (GCEE Annual Report 2017 items 657 ff; IMF, 2018a.). Worth noting, however, is that the current situation is **thus far not** comparable to the type of **trade war** seen in the 1920s and 1930s. At that time, several countries simultaneously raised their tariffs against other

↘ CHART 2

United States tariff increases and retaliation by largest trading partners in 2018



1 – Value of goods of imports from respectively to the United States in 2017. 2 – Amongst others vehicles, aircraft und computer parts, phase 1. 3 – Amongst others vehicles, aircraft und computer parts, phase 2. 4 – Amongst others computer und vehicle parts; 10 % tariffs (25 % from January 2019). 5 – Amongst others aluminium waste, pork, fruits und nuts from the United States. 6 – Steel and aluminium, various agricultural products, food und consumer goods. 7 – Amongst others vehicles und soybeans, phase 1. 8 – Amongst others vehicles und soybeans, phase 2. 9 – Amongst others various agriculture products, pharmaceutical products and clothing. 10 – United States Department of Commerce. 11 – Value of goods in 2017.

Quellen: Eurostat, National Bureau of Statistics of China, Peterson Institute for International Economics, Office of the United States Trade Representative, United States Census Bureau, United States Department of Commerce

countries, such that the average worldwide tariff rate increased from around 8 % in 1920 to around 25 % in 1933 (GCEE Annual Report 2017 item 637). This time, the tariff hikes are either being imposed solely by the United States or directed solely against that country.

Moreover, the **trade conflict** between the **United States** and **China** is even more serious than with Europe. ↘ CHART 2 The effects this would cause on German exports are unclear, as risk for supply chains are offset by opportunities resulting from a potential diversion of trade flows. The **risks** for Germany lie primarily **in the long-term trend towards greater protectionism** and the accompanying reduction in the international division of labour. According to estimates, around half of the growth in real income per capita in Germany in the past two decades was attributable to trade (GCEE Annual Report 2017 item 661).

10. The United States administration provides differing reasons for the increase in tariffs. The tariffs on steel and aluminium for example, based on US law (Trade Expansion Act of 1962, Section 232) and WTO law (GATT Article 21), officially serve to **protect national security**. The United States has not applied these two articles of law since the WTO was founded in 1995, and even the U.S. Department of Defense has disputed the necessity of protection by way of tariffs (U.S. Department of Defense, 2018).

The US administration has justified the latest announced tariffs against China in particular (Trade Act of 1974, Section 301) as a response to **unfair practices in China** relating to **technology and intangible goods**, such as forced transfer of technology or theft of intellectual property. US government representatives have been making this accusation for several years. The European Commission has also levelled criticism at China several times (European Commission, 2018a), and initiated a WTO consultation (European Commission, 2018b). However, the relevant rules under WTO law have limited applicability in this case, and lack precise definitions and descriptions of scope in some places. ↘ ITEMS 178 FF.

11. The public debate surrounding the tariff increases focuses particularly on the **United States' trade deficit** with China, the EU and Germany. The United States has had a permanent current account deficit since the 1980s, against ever-changing partners (GCEE Economic Forecast 2017 box 2). ↘ CHART 3 LEFT It is, however, unclear whether the EU actually has a surplus in relation to the United States when services and primary income are taken into account. For example, the figures of the U.S. Bureau of Economic Analysis (BEA) differ from those of Eurostat due to the different measurement of trade of services and primary income (Eurostat, 2017). ↘ CHART 3 RIGHT

The **German current account surplus** peaked at 8.9 % of nominal GDP in 2015 and has been declining since then. In 2017, that figure stood at 7.9 %. It can be expected to continue to decline until 2019, to 6.6 %. ↘ ITEM 315 Even though the focus should actually be on the figures for the European Monetary Union as a whole and despite of numerous important reasons for the slow reduction in the German current account surplus, this is the subject of critical international debate.

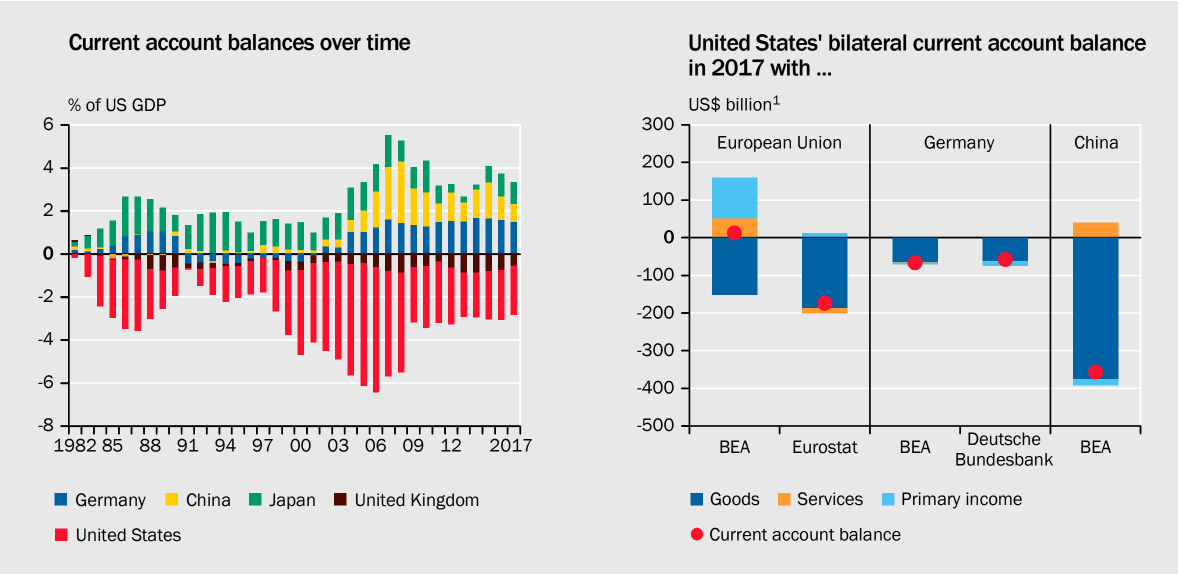
Contrary to the mercantilistic rhetoric of its president, the United States is not drained of funds equivalent to the trade deficit by the rest of the world every year. One prominent reason for the enduring deficit is the United States' "exorbitant privilege" – many central banks and private investors worldwide are willing to hold US government bonds as safe assets (GCEE Economic Forecast 2017 box 2). At the end of the day, **international trade is not a zero sum game** but an important source of global prosperity (GCEE Annual Report 2017 items 629 ff.).

12. European Commission President Juncker and US President Trump announced a **joint agreement on the trade conflict** in July 2018 (European Commission, 2018b). While this has **reduced the danger of escalation** of the trade conflict between the two trade blocs, the situation nevertheless continues to represent a **step backwards** in global trade liberalisation and trade between the EU and the United States compared to the pre-Trump era.

The tariffs introduced before the deal remain in effect and many elements of the agreement were kept vague. Furthermore, some of the statements only reflect the **status quo**. A rise in EU imports of US soybeans has been observed for some time and is likely related to Chinese tariffs on US soybeans. An increase in the import of US liquefied gas has also already been evident for quite some time

↘ CHART 3

Comparison of the current account balances in selected countries



1 – Data of Deutsche Bundesbank and Eurostat calculated with the average exchange rate Euro to US dollar in 2017.

Sources: BEA, Deutsche Bundesbank, Eurostat, IMF, OECD, own calculations

(European Commission, 2018c). This is part of the EU strategy to reduce its dependency on Russian gas imports (European Commission, 2014).

13. The key part of the statement is the intention to work together towards **reducing tariffs, non-tariff barriers to trade and subsidies to zero** for non-auto industrial goods. Overall, however, this is less than was planned in the Transatlantic Trade and Investment Partnership (TTIP) free trade agreement. TTIP negotiations were on the brink of completion in 2016, and the agreement would have encompassed many more areas and rules (GCEE Annual Report 2015 items 72 ff.).

The negotiation process is similar to that of the US administration's renegotiations of the North American Free Trade Agreement (NATFA) with Canada and Mexico. The draft of the new **United States-Mexico-Canada Agreement (USMCA)** combines the old NAFTA agreement with elements of the Trans-Pacific Partnership (TPP), and adds special rules in smaller sub-sectors such as dairy products and domestic sections of automotive manufacture, some of which restrict trade. Overall it also does less in terms of trade liberalisation than was originally planned in the TTP, on which negotiations were concluded back in 2016.

14. Yalcin et al. (2017) and Gemeinschaftsdiagnose (2018) show that increasing tariffs unilaterally could be beneficial for the United States, whereas in the EU, for example, GDP might decline. However, if other WTO members were to respond by also introducing tariffs, **everyone would lose**, although the rest of the world would then lose less than with unilateral tariff increases. There would be no incentive in such a situation for any country to unilaterally lower its tariffs again; but there would be one to retaliate against the increases. As precursors to the WTO, international agreements and the General Agreement on Tariffs and

Trade (GATT) were concluded for that very reason – to **prevent** such an **escalation** as had occurred in the 1930s.

15. The top priority of German and European policymakers should thus be to strengthen the **multilateral**, rule-based trading system and the WTO – the institution created for this purpose. ↘ ITEMS 178 FF. The currently valid basic rules were negotiated in the Uruguay Round between 1986 and 1994; the present situation could be seen as an opportunity to step up international efforts again to reduce tariffs within the WTO. The joint EU-US statement issued in July 2018 accordingly refers to reforming and **strengthening the WTO**, although US trade representatives have repeatedly attacked the organisation in the past year.

The reform could address the criticism in particular from the United States and the EU, and provide for stricter rules to contain market-distorting subsidies and state enterprises and protect technology and intellectual property. ↘ ITEM 183 In addition, a more effective and efficient organisational structure, such as with regard to the WTO Appellate Body ↘ ITEM 181 criticised by the United States or to more effective negotiation and decision-making processes, ↘ ITEM 182 could give the WTO more power to act. The rules may also need to be updated to cover new areas such as digital services ↘ ITEM 183, to better account for developing countries ↘ ITEM 184 or to involve plurilateral agreements to a higher degree. ↘ ITEM 185

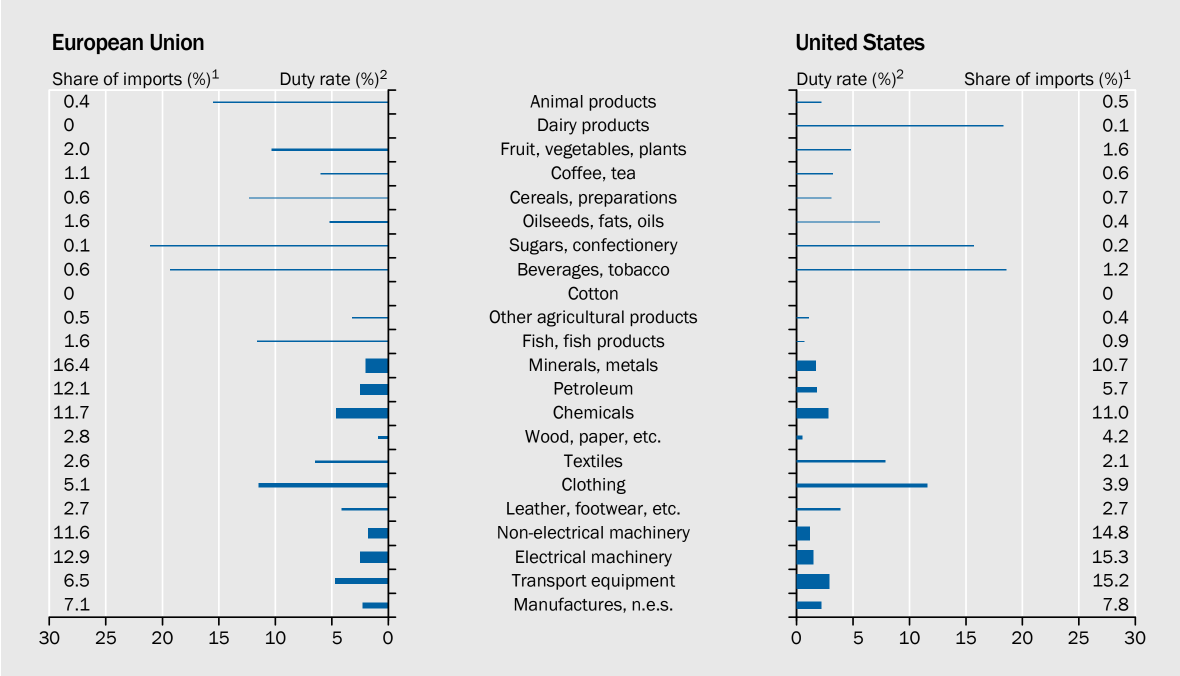
16. The WTO provides for retaliation against those countries that infringe on its rules. The prospect of retaliation is intended to curb protectionism from the outset. The EU should consider such **retaliatory measures** under WTO rules. Such retaliation should be limited in scope under those rules, so that the EU itself does not trigger the next stage of escalation.

Yalcin et al. (2017) estimate that responding to tariff hikes actually results in losses for the country that started increasing tariffs. Without a **credible means of punishing** rule infringements, the rule-based trading system between 164 countries would rely exclusively on members' good will. This proved to be insufficient in 2002, when the US administration under President George W. Bush unilaterally raised steel tariffs. It reduced them the following year not least on account of the threat of retaliation tariffs by major trading partners based on the verdict of the WTO.

17. The EU could conclude **new free trade agreements** to take advantage of the opportunity of further increasing welfare by means of liberalising trade (GCEE Annual Report 2017 items 629 ff.). The United States would be an important trading partner to approach as a first step. Since the EU and the United States still impose relatively high tariffs, ↘ CHART 4 the EU could propose a bilateral tariff reduction. This proposal could build on parts of the TTIP negotiations, in which many tariffs were identified that should have been reduced to zero by the free trade agreement.

The free trade agreements must refer to "substantially all the trade between two territories" (GATT, Article XXIV: 8) in order to be classified as such under the rules of the WTO. Agreements for only one or several economic areas are thus

↘ CHART 4
Tariffs and shares of imports by type of product in the European Union and the United States



1 – As of 2016; Share of the respective product to the total imports. 2 – As of 2017; the bars indicate the average duty rate, the width is in proportion to the share of import of the respective product.

Sources: WTO, own calculations

not permissible and would mean lowering corresponding tariffs against all WTO members, as these agreements are not exempt from application of the most-favoured-nation principle.

Moreover, the EU could step up its efforts against protectionism and conclude free trade agreements with other regions, particularly in a situation in which the United States relinquishes its traditional role as pioneer in liberalising global trade. The EU has already embarked on this course and is currently negotiating a free trade agreement with New Zealand, Australia, Singapore, Mexico, the South American trade bloc Mercosur and Chile, and an investment agreement with China.

18. As regards **foreign direct investment**, the Federal Government announced that Germany would take its **own protectionist measures** this year. More stringent rules on veto power under the Foreign Trade and Payments Regulation (*Außenwirtschaftsverordnung*) are aimed at giving the Federal Government more control over equity stakes and takeovers by investors outside the EU (BMWi, 2018). A handful of corporate takeovers by Chinese investors is dominating the debate on this issue; however the Chinese share of total foreign direct investment at around 7 % in 2017 is relatively small (Rusche, 2018; GCEE Annual Report 2016 items 982 ff.) Moreover, from a German perspective, the fact that takeovers involve the use of foreign tax funds or that investors might come from China (GCEE Annual Report 2016 item 988) is not a problem in itself.

Technical knowledge and intellectual property could be better protected by using the WTO's resources, which are certainly not exhausted, (GCEE Annual Report

2016 item 989) or through a WTO reform ↘ ITEM 178 FF., than by requiring investment approval. Instead of hindering access to Germany as a business location and discouraging foreign investors, German policymakers should instead improve the country's attractiveness as a location for business and attempt to attract foreign direct investment. Such steps result in more innovation and contribute to prosperity, such as by providing additional capital, and thus creating more jobs and enabling greater labour productivity. This approach does not preclude examining foreign direct investment in terms of security-relevant economic interests under European regulations (GCEE Annual Report 2016 item 986).

WORLD TRADE: KEY MESSAGES

- Strengthening the multilateral rule-based trading system and the WTO
- Responding as EU to protectionism through retaliatory measures under WTO rules
- Concluding new free trade agreements with the United States and other countries

2. Facing international tax competition

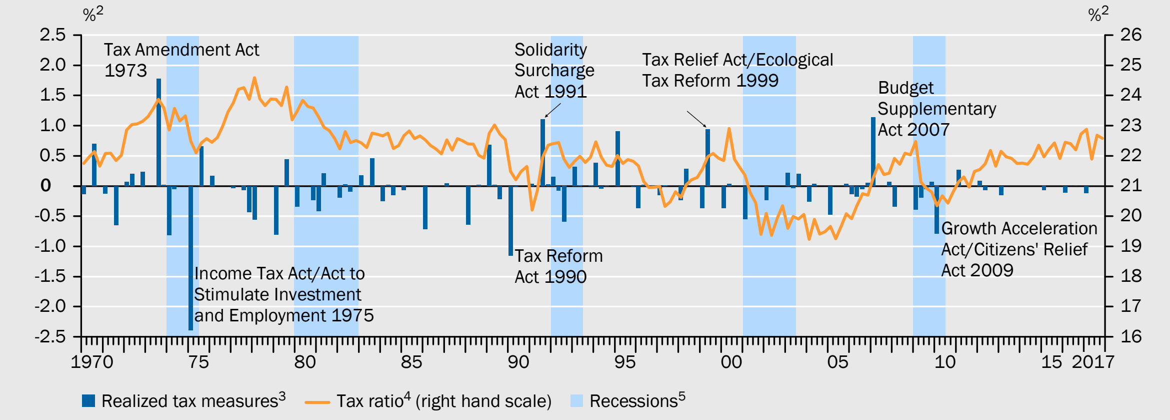
19. Many **OECD countries** with previously even higher corporate tax rates than Germany have recently reduced their statutory **tax rates**. The opposite trend can be observed in Germany as many municipalities have raised the local business tax in recent years. This is **gradually moving Germany back to the top** of the international business tax ranking. This is unfavourable, as statutory tax rates are decisive for profit shifting of multinationals. Abolishing the solidarity surcharge could more or less offset the tax rate increases since the 2008 tax reform and alleviate the tax burden for firms and the self-employed. ↘ ITEMS 635 FF. Tax measures are suitable to increase potential output.

There have been **hardly any tax reforms in Germany** in recent years. ↘ CHART 5 Only minor corrections have been made to the progressive income tax schedule since 2010; however these have not offset the increased tax burden due to bracket creep (GCEE Annual Report 2017 items 586 ff.). Since then, tax revenues have risen more strongly than nominal GDP when considering annual averages. An international comparison shows that lower tax rates do not necessarily result in lower tax revenues. Reforms often broaden the tax base. This can reduce distortions, while ensuring the revenues necessary for the **provision of public goods**.

20. The reform implemented by the United States at the beginning of this year, was the **most comprehensive tax reform** undertaken by an OECD country in recent years. However, this reform goes far beyond merely lowering taxes. It has restructured the taxation of multinationals, making profit shifting to tax havens more difficult. ↘ ITEMS 570 FF. it includes a patent box levying a lower tax rate on income generated by patents and other types of intellectual property. ↘ ITEM 597

↘ CHART 5

Major tax measures and tax ratio in Germany[1]



1 – Since 1991 Germany, before Former Federal Republic of Germany. 2 – As a percentage of nominal GDP. 3 – Estimated revenue impact (after full implementation at an annual level) of a tax measure in the quarter of implementation, (–) = negative revenue effect, (+) = positive revenue effect. 4 – Cash tax receipts. 5 – As dated by the German Council of Economic Experts.

Sources: Christofzik and Elstner (2018), own representation

21. **Patent boxes** are used in some OECD countries as an output-oriented tax instrument to promote research and development (R&D). In Germany, in contrast, there are currently discussions on an input-oriented tax relief in the context of the high-tech strategy of the Federal Government. However, R&D tax incentives run the risk of being accompanied by considerable **deadweight loss**. The OECD has thus developed a nexus approach to limit the use of patent boxes as an instrument for harmful tax competition. The approach requires, for example, that a tax credit is only to be granted if a portion of the research remains in the resident country or is further developed there. It also asks for an exclusion of trademark rights from the preferential tax regime.

Income derived from patents or other intellectual property is generally more mobile than other types of income. Despite the associated deadweight losses, the idea of creating a patent box in Germany that is in line with the nexus approach could be considered as an **instrument in tax competition**. ↘ ITEMS 595 FF.

22. Digital business models are also considered extremely mobile. Their taxation is complex for the particular reason that they do not necessarily require physical presence in a country. The European Commission has therefore made two proposals for a Council Directive with the objective of more effective **taxation of the digital economy**. One proposal defines a “digital presence” or a virtual permanent establishment while the other focuses on the idea of an interim digital services tax. However, both proposals have a number of weaknesses. It would be appropriate instead to first eliminate tax loopholes and preferential tax regimes that digital companies in particular use at present to reduce their tax burden; this would ensure effective taxation. ↘ ITEMS 616 FF.

Instigating an **internationally coordinated** OECD **process** would be more helpful in order to come up with a fundamental solution and as a means of combating harmful tax competition strategies. A **minimum tax** in the form of a taxation of foreign-source income, which is also part of the US tax reform and is currently also being discussed in Germany, could be an **interim solution** as long as it does not restrict economically appropriate tax competition. However, it does not solve the underlying problems and only addresses the symptoms. ↘ ITEM 631

23. **Conditions for doing business** are important, particularly for a high-tax country such as Germany. As these influence firm relocation and investment decisions, distortions in the current tax system should be addressed. This includes **abolishing the discrimination of equity financing**. This is a problem especially for young companies that barely have access to other types of financing. An equal treatment could be achieved, in principle, through the council directive on a common consolidated corporate tax base (CCCTB), published by the European Commission in 2016 (GCEE Annual Report 2017 box 2). However, this proposal calls only for taking new equity into account, meaning that existing distortions are not fully eliminated. With its proposed **allowance for corporate equity**, the German Council of Economic Experts has presented a means of completely removing the discrimination. Implementation would currently involve a yearly loss of revenue of between € 2.8 billion Euro at a notional interest rate of 1.5 % and 5.6 billion Euro at a notional interest rate of 3 %.

INTERNATIONAL TAX COMPETITION: KEY MESSAGES

- Abolishment of the solidarity surcharge to curb the recent rise in statutory business taxes due to the local business tax
- Rejection of the proposals for taxation of digital companies and minimum taxation only as interim solution
- Possible introduction of a patent box as a tax competition instrument and an allowance for corporate equity to eliminate the distortion in the tax system

3. More efficient climate protection through market-based solutions

24. US President Trump announced his country's exit from the Paris climate agreement in summer 2017. Thus, ironically, the world's second largest emitter of greenhouse gases after China is withdrawing from the agreement signed by 195 states, constituting a setback of years in the efforts for a **global solution to climate protection**. This is particularly serious as national efforts to reduce greenhouse gases are highly inefficient in economic terms, with a global solution ultimately essential (GCEE Annual Report 2016 items 856 ff.).

25. Setting a **standard international carbon price** as a steering instrument – something many institutions have demanded for some time now – would be more effective than national turnarounds in energy policy or national climate plans (GCEE Annual Report 2009 items 366 ff.; Academic Advisory Council to the German Federal Ministry of Finance, 2010; acatech, 2012; Academic Advisory Council to the BMWi, 2012; Monopolies Commission, 2013; Federal Audit Office 2018). The difficulties of **international coordination** cannot

justify German policymakers charting a much more expensive and inefficient special German course instead of strengthening their efforts at coordination.

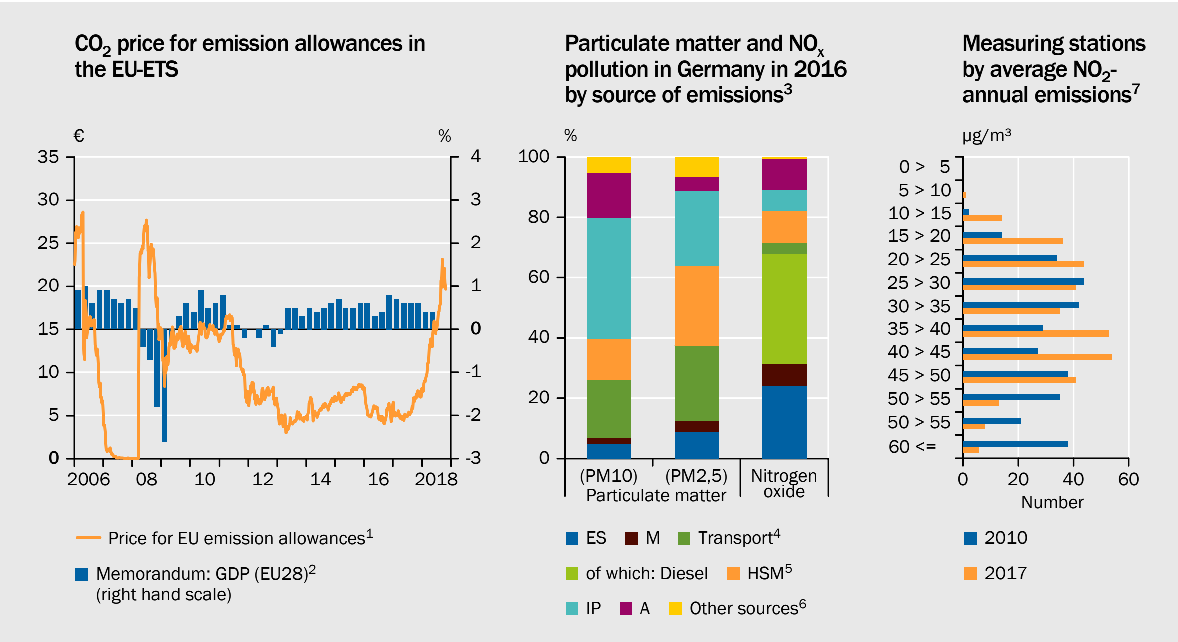
Cramton et al. (2017) demonstrate means of international cooperation via carbon pricing and options for joint obligation of different countries. For example, assuming the international community is fundamentally committed to climate protection, a jointly selected global price that could be achieved with a variety of different national systems, such as taxes or market systems, and whose income would remain national, could, in combination with a fund to support poorer countries, facilitate coordination (MacKay et al., 2015).

26. As a minimum, the EU member states should back a uniform **European Emissions Trading System (EU ETS)** to facilitate implementation of a common international carbon price. The price of EU ETS emission allowances has been relatively low in recent years, thus creating only limited incentives to adjust behaviour or innovate (GCEE Annual Report 2016 box 29). One reason for this might have been an over-supply of carbon allowances.

The EU ETS price has risen dramatically since the middle of last year. ↘ CHART 6 LEFT This is partly due to various political measures and the anticipation thereof among market players. For example, the supply of emission allowances will be controlled by a market stability reserve from the beginning of 2019, which means that any not allocated allowances, and those backloaded from 2010 to 2014, will be removed from the market. Moreover, the European Commission and the European Parliament agreed on EU ETS reforms for phase 4 (2021 to

↘ CHART 6

Price for EU emission allowances as well as particulate matter and nitrogen oxide pollution in Germany



1 – Euro per emission allowance for one tonne of CO_2; weekly averages. 2 – Real GDP; quarters, seasonally and working day-adjusted; change on previous quarter. 3 – ES-energy sector, M-manufacturing, HSM-households and small consumers, IP-industrial processes, A-agriculture. 4 – Excluding agricultural and forestry transport. 5 – Including agricultural and forestry transport. 6 – Waste and sewage, emissions from diffuse sources such as fuels, military and other small sources. 7 – Background monitoring and traffic stations for measuring nitrogen dioxides in urban areas.

Sources: Eurostat, Thomson Reuters, Umweltbundesamt, own calculations

2030), including a faster annual reduction in the overall number of emission allowances, and new rules to address the avoidance of a shift of green house gas emission out of the scope of the EU ETS (carbon leakage) (European Commission, 2018).

The fact that not **all sectors and technologies** are part of European emissions trading remains problematic. Emissions thus tend not to be reduced in the areas where cutting them would be the most cost-effective. The transport sector, private households and industries excluded from the system to date, in particular, must be included in order to ensure efficient reduction of greenhouse gases and enable the thus required sector coupling of the electricity, heating and transport industries (GCEE Annual Report 2016 items 898 ff.).

27. The newly created Commission on Growth, Structural Change and Employment ("coal exit commission") to prepare a roadmap for Germany's **coal phase-out**, in particular, is a clear example of why an internationally coordinated approach is necessary. As the national emission target is measured exclusively on German production, the carbon savings from phasing out coal can be "exported" or can have the effect of lowering the price of emissions from other countries in the EU ETS. The volume of worldwide emissions thus remains unchanged. If there were a standard carbon price, this would also force coal out of electricity generation in the medium term, but would do so more cost-effectively for the global energy system. A phase-out structured by the "coal exit commission" would in contrast raise the costs for Germany alone.

28. Unlike the reduction of carbon emissions, which is a global issue, cities must address the problem of **particulate matter and nitrogen oxide emissions** at local level. Although emissions of particulate matter (Pm10) and nitrogen oxide caused by humans declined by 38 % and 44 %, respectively, between 1995 and 2016 according to the German Federal Environment Agency, with the traffic sector responsible for a large share, the legal limits are still exceeded at some measuring stations. This is, however, a localised problem and actually not a European problem.

The European Commission's infringement proceedings initiated in 2015 due to breaches of nitrogen dioxide (NO2) limits were referred to the European Court of Justice this year following expiry of the maximum deadline extensions (European Commission, 2018e). Environmental Action Germany (Deutsche Umwelthilfe) has also filed lawsuits for the same reason against various federal states due to their air pollution control planning. The implementation of the EU Directive 2008/50/EC in the Federal Emission Control Act (*Bundesimmisionsschutzgesetz*) (2010) provides that, for the protection of human health, nitrogen dioxide levels must not exceed 200 micrograms (hourly average) more than 18 times per calendar year (section 3 (1) of the Federal Emission Control Regulation (*Bundesimmisionsschutzverordnung* – BImSchV). This rule was breached at 10 measuring stations in 2010, but at none at all in 2017. A second limit of 40 micrograms of nitrogen dioxide per cubic metre of air refers to the annual average for the calendar year (section 3 (2) BImSchV). This level was exceeded at 49 % of urban measuring stations in 2010, and at 35 % in 2017. ↘ CHART 6 RIGHT

29. Traffic was responsible for 40 % of nitrogen oxide emissions in 2016, of which 91 % were **diesel vehicles** ↘ CHART 6 CENTRE, although this may vary from region to region. The proportion of diesel vehicles in Germany is very high on an international scale, for example due to tax incentives. There have also been cases of fraud in connection with diesel vehicle registrations. And the European Commission accused the Federal Government in infringement proceedings of disregarding EU regulations on type approval of vehicles and not adequately sanctioning legal violations (European Commission, 2018e).

Incentives and action are therefore discussed to reduce nitrogen oxide emissions by retrofitting or exchanging existing diesel vehicles, and through **driving bans** relating to certain emission categories in German cities. The Federal Administrative Court (BVerwG) ruled that bans can be imposed in environmental zones if this is proportionate and the only suitable method of complying with limits as quickly as possible (BVerwG, 2018). Driving bans have already been introduced in some cities, either voluntarily, as in some streets in Hamburg (with effect since 31 May 2018), or by court order, as in Stuttgart, Frankfurt (from 1 January 2019) and Berlin (from 1 March 2019).

30. However, better than a driving ban would be a **city centre congestion charge**. This would mean polluters would bear a portion of the costs, while the use of lower-emission transport and more efficient use of vehicles would become more attractive. Nevertheless households and businesses, for example in the commercial, retail and services sectors, would have the option of continuing to use the vehicles concerned if this were still affordable for them at the higher costs. It would divide the costs of improving air quality in line with the polluter pays principle, whereas driving bans impose all of the costs on the vehicle owners affected by the ban. The charge would only make a drive with an affected diesel vehicle in the city expensive, unlike a ban, which would make it impossible.

The amount of the charge could be based on the local pollution level, the time of day and vehicle exhaust emissions. Ideally, it would be dynamically linked to demand (Cramton et al., 2018). The charge would make the costs of the external effects visible. It could be implemented, like a driving ban, on a random sample basis in connection with punitive action or new technologies, such as the number plate recognition cameras in London.

31. A congestion charge could also be aimed at vehicles **other than just diesel vehicles**. For example, although diesel motors cause more nitrogen oxide emissions than other engines, they are not the main culprit when it comes to other negative external effects of traffic such as noise, congestion, competition with other uses of space (e.g. residential space), carbon emissions or particulate matter. Around 85 % of traffic-related particulate matter (comprising 20-25 % of all particulate matter ↘ CHART 6 CENTRE) is generated from road dust suspension and wear and tear processes regardless of engine type (LUBW, 2017).

32. The possible effects can be examined approximately in cities where this type of road charge has already been introduced. **Traffic** has **decreased greatly**, as expected, in sections of cities with congestion charges; in Singapore (Olszewski

and Xie, 2005), London (Santos and Fraser, 2006), Milan (Gibson and Carnovale, 2015), Gothenburg (Börjesson and Kristoffersson, 2015) and Stockholm (Eliasson et al., 2009).

In Stockholm, for instance, the number of car trips has fallen by around 25 % since the ban was introduced (Eliasson, 2014), of which ten percentage points came from travel to and from work which was moved to public transport, six percentage points from discretionary travel which changed the targeted area or were less frequent and five percentage points from professional travel, like taxi or deliveries, which was omitted. **Car travel was cut by a third** in London, primarily through a reduction of trips for social and leisure purposes and a shift to other modes of transport (Transport for London, 2008). Journey times (Eliasson, 2014), traffic accidents and accident rates (Green et al., 2016) also decreased in these cities.

The **reduction levels of air pollution** differ, which is largely due to the structure of the systems and available alternatives. In Stockholm, for example, nitrogen oxide only declined by 8.5 % due to increased use of older public buses with higher emissions after introduction of the charge (Eliasson, 2014). The reductions in London were also only moderate (Transport for London, 2008). In Milan, however, black carbon concentration (Invernizzi et al., 2011) and CO2 (Gibson and Carnovale, 2015) has fallen significantly. The effects on the environment are clearly linked to the type of substitution, such as the trend towards higher-emitting vehicles (Gallego et al., 2013), or exploitation of loopholes in political measures (Davis, 2008). All the more reason, then, to take this into account and not have a ban restricted to particular types of motor.

With respect to the **change in usage behaviour**, no difference was noted in Stockholm related to income groups (Karlström und Franklin, 2009). An overview of studies related to road charges by the OECD (ITF, 2018) notes that the overall distributional impact is small, even though some households in special city-areas or of specific socio-demographic characteristics are affected more seriously. Depending on the design of the system the introduction can have a progressive or regressive impact (Santos und Rojey, 2002; Bureau und Glachant, 2008; Hall, 2018; ITF, 2018). In London, the general assessment of affordability of travel did not change before or after the introduction of the charge (Transport for London, 2008).

CLIMATE AND ENVIRONMENTAL PROTECTION: KEY MESSAGES

- Working towards a standard international carbon price as a steering instrument
- Strengthening the EU ETS and involvement of all end-users for effective sector coupling
- Localised solutions for problems with nitrogen oxide and particulate matter; e.g. congestion charge

III. EUROPE: CUSHIONING BREXIT IMPACT; STRENGTHENING THE EU AND THE EURO AREA

33. Global challenges underscore the value of the **European Union** as a **political project** that promotes peace among its member states and contributes to prosperity in Europe: Taken individually, the European countries are rather small compared to the United States and China, meaning that the EU member states are well-advised to count on European integration and on the potential of a common economic area. Moreover, only a united Europe has the necessary power in international negotiations and disputes.

However, the EU is increasingly challenged on account of Brexit and the rise of eurosceptic parties, such as in Italy, the Netherlands and Austria. Politics should meet the growing scepticism regarding the **EU** and particularly the **European Monetary Union** with appropriate measures to strengthen these institutions. This would also be an appropriate reaction to the international trade conflicts.

1. Prevent Brexit from causing disruptions

34. **No final agreement** has been reached yet in the negotiations on the provisions of Britain's withdrawal from the EU and the two partners' future relations. The British government and EU representatives came to a general agreement on large parts of a withdrawal agreement in March 2018 (European Commission, 2018f). In particular, they agreed on a **transitional period** from 30 March 2019 to 31 December 2020. EU regulations would, for the most part, continue to apply to the United Kingdom during this period, although, the United Kingdom would no longer participate in EU decisions.

However, this transitional period will only enter into effect if the entire withdrawal agreement has been fully negotiated and adopted, and if there is a political understanding **on the framework of future relations**, i.e., a follow-up agreement on the time after the transitional period has expired. The partners are currently negotiating both of these matters at the same time. Given that the European summit in October failed to reach a compromise, it is still possible that the negotiations will **not result in agreement by the deadline** and the threat of a disorderly Brexit has still not been contained.

“No Brexit” instead of “no deal”

35. The structure of future business relations between the United Kingdom and the remaining EU member states is key to determining the potential impacts Brexit will have on the further economic development of both regions. **Even if the two parties were to come to a deal** on a free trade agreement, there would still be frictions in many areas, for example, due to different regulations or border controls that might be necessary, as compared to the situation with the UK remaining in the EU. Those could lead to considerable changes in

internationally integrated value chains. Morevover, the British economy relies on foreign workers from the EU, which may not be as easily accesible as they will depend on the follow-up agreement.

36. This is likely to **be associated with negative effects**, particularly for the British economy, but also in weakened form for the remaining EU member states. In this context, special attention should be given to the financial sector, which is of major importance for the UK economy. At the same time, financial institutes from the United Kingdom play an important role for companies in the EU, for example in areas such as clearing and derivatives ↘ BOX 14 PAGE 274

Brexit, without an agreement on a third-country equivalence regime, could imply, that financial market participants from the United Kingdom have only limited access to the EU-market. ↘ BOX 14 Depending on their business model, banks would have to adjust, e.g. through subsidiaries in the EU, in order to continue providing sevices. Assesment of risks for financial stability are highly uncertain. The ECB (2017) does not expect, that Brexit reduces availability of financial services, even though it might raise their costs. In view of the uncertainty surrounding Brexit, it could be advantageous for the United Kingdom and the EU to agree on temporary exemptions that would provide financial market participants access to their respective markets beyond the exit date, independent of a final agreement. ↘ BOX 14

37. Should the negotiating partners fail to agree on a comprehensive trade agreement, the United Kingdom would become a third country from the perspective of the remaining EU member states and subject to the **rules of the World Trade Organisation (WTO)** that apply to international trade. This would make access to the European Single Market more difficult for British goods and would result in tariffs on these goods that the EU would have to levy in line with the WTO's most-favoured-nation principle. The United Kingdom could set its own tariffs independently after Brexit but would have to abide by the WTO rules. For example, the United Kingdom's intended provisional adoption of EU external tariffs would have to be checked by the other WTO members.

Since, by virtue of its membership in the EU, the United Kingdom has been a member of the WTO until now, its exit from the EU also means negotiations within the WTO on the rules previously applicable to the EU as a whole, such as for quotas and subsidies. Depending on the process, the new rules could be rejected by the remaining members of the WTO, which could lead to difficult negotiations especially around quotas (Tietje, 2017). Brexit will mean that the United Kingdom will also likely lose the right to participate in the EU's existing free trade agreements and may have to conclude its own comprehensive agreements with the trading partners.

38. **A great deal of uncertainty** surrounds estimates of the economic **impact** of Brexit, not least due to the lack of clarity regarding the structure of future relations that still prevails (GCEE Annual Report 2016 items 306 ff.). Studies that attempt to quantify the effect of Brexit on future economic development therefore look at stylised scenarios, which each portray different potential

negotiation outcomes. In addition to the specific **assumptions** they make for each scenario, the studies differ in their methods (GCEE Annual Report 2016 items 311 ff.). Many studies rely on general equilibrium models that depict the trade relations between the parties in detail, while other analyses use dynamic macroeconomic models with few parameters or econometric estimates.

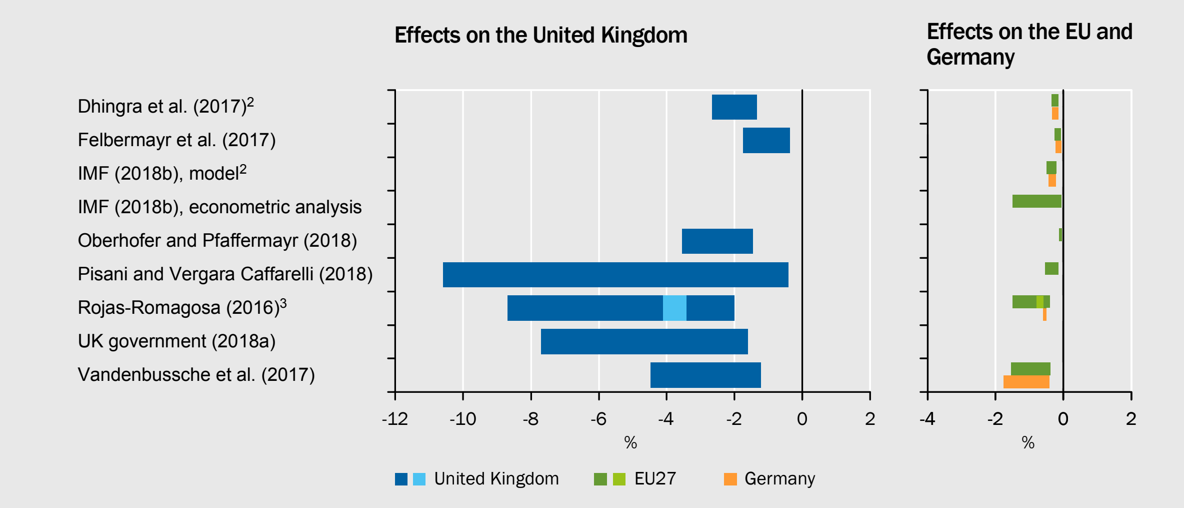
39. The overwhelming majority of the studies conclude for all scenarios examined that **Brexit** would have a **negative** impact on the British economy ↘ CHART 7 (GCEE Annual Report 2016 table 17). The impact is stronger the more restrictions the selected scenarios place on economic exchange. The effects on the remaining EU member states would also be negative although much smaller. ↘ CHART 7 The degree of impact differs considerably, depending on a country's economic interdependence with the United Kingdom; Ireland, for example, can be expected to suffer a heavy blow through Brexit (Vandenbussche et al., 2017; IWF, 2018b).

40. Given the likely negative economic and political impact, the GCEE continues to believe the **best solution** to be the United Kingdom and the negotiating parties **still** finding a way to **prevent Brexit**. The EU, for example, could promise to remove any legal obstacles to reversing the decision (GCEE Annual Report 2016 item 289) after a second referendum. Should a reversal of the decision not be possible, the parties should conclude an agreement that retains as much of the economic integration and political collaboration as possible.

However, efforts should be made to **avoid** the impression of **cherry-picking** by the United Kingdom. For a third country, such as the United Kingdom would then be, no more advantageous rules should apply than for EU member states. This could otherwise set a precedent, which could exacerbate future conflicts

↘ CHART 7

Estimates of the long-term economic effects of Brexit (selection)[1]



1 – The blue bars indicate the range of estimated deviation in GDP, value added, welfare or per capita GDP level from a baseline scenario without Brexit. The range results in particular from differences in each of the scenarios analysed of the structure of future business relations between the United Kingdom and the 27 remaining EU member states. See the GCEE Annual Report 2016 Table 17 for an overview of previous estimates of effects on the United Kingdom. 2 – Values for Germany read from illustrations in publications. 3 – The light green, light blue or orange colored bar refer to the main scenarios.

Sources: Specified sources, own presentation within the remaining EU and endanger the stability of the European Single Market.

41. **Very limited time** remains to negotiate the agreement governing future relations. There would be options to increase the time for negotiations: the EU should **separate the conclusion of the withdrawal agreement** including the transitional period, which is already well underway, from an agreement on future collaboration. This would reduce the risk of a disorderly Brexit in the short term, as an additional 21 months could be used for negotiations while largely maintaining the status quo. However, even this time would be short compared to the typical period for negotiations on comprehensive free trade agreements; just a few weeks until the beginning of 2019 would only suffice for a superficial political agreement anyway.

As an alternative, the EU member states could jointly extend the general deadline for **withdrawal negotiations**, set out in Article 50 TEU (GCEE Annual Report 2016 item 289). On the other hand, adhering to the set deadlines could, however, maintain the pressure on the negotiating parties to come to an agreement, and in the positive scenario, lead to a better solution.

42. The **danger** of an unorderly Brexit, which would be the case if no agreement is concluded before the deadline expires should **not be underestimated**. In contrast to other negotiations, there would be no falling back on the status quo if no agreement is reached regarding Brexit. A hasty withdrawal of the United Kingdom if the negotiations fail could thus result in severe disruption to economic activity in the United Kingdom and the EU.

The United Kingdom would have no clear relationships with its trading partners and additional border and customs controls might have to be introduced over night. Most European laws would not be changed, as they would be part of the British jurisdiction. This was ensured by the "EU Withdrawal Bill" that came into effect on June 26, 2018. The German government should prepare anyway for an unorderly Brexit.

Comprehensive free trade agreement as minimum solution

43. The design of the United Kingdom's future access to the European Single Market is of major importance in the withdrawal negotiations. Closely connected is the question of membership in the customs union and the regulations related to the border between Ireland and Northern Ireland.

44. A White Paper on **the future relationship** with the EU („Chequers Plan") was **published** in July by the government of the United Kingdom (UK Government, 2018).

– **As regards trade in goods**, the paper proposes that the United Kingdom **continues** to participate **de facto** in the Single Market and thus maintains the relevant EU rules governing it. However, the United Kingdom would like to be able to conclude its **own free trade agreements with third countries**. It proposes achieving this through the Facilitated Customs Arrangement, under which the United Kingdom would levy varying tariffs at the border depending on the destination of the goods. It is still **unclear how this could work** in practice, legally and without a significant amount of red tape. EU chief negotiator Barnier has already expressed his **skepticism** about this matter (European Commission, 2018c). One of his questions was how a country can collect tariffs for the EU without being supervised by the EU.

– The paper does not propose full assumption of the EU common rulebook for the **service sector**, which makes up around 42 % of the exports of the United Kingdom to the EU. This could enable the United Kingdom to admit other possibly lower standards than the EU in the service sector, for example, in antitrust law, occupational safety, consumer protection, regulation of financial markets or environmental law. On the other hand, however, British service providers would **no longer have unlimited access to the European Single Market**, not least in the financial sector that is particularly important to the British economy.

45. One major problem with the proposal is that this would permit the United Kingdom to participate in only some of the **four freedoms** of the EU. This would be at odds with the **guidelines for negotiations** with the United Kingdom resolved by the European Council (2017). According to them, a non-member state cannot have the same rights and advantages as member states without having the same duties as these. The agreement outlined in the Chequers plan would resemble the Swiss model, which only includes the free trade of goods but does not consider services. Many governments together as well as the EU-Commission are not in favor of such a model, though.

46. The former British foreign secretary Johnson (2018) alternatively proposed a „Super Canada“ free trade agreement that would be based on the agreement between Canada and the EU (CETA). According to his plan, no tariffs and quotas would be imposed on any imports and exports. Moreover, regulations and standards would be recognized by the other partner. With few exemptions, all service sectors would be covered by such an agreement. In order to facilitate custom checks, new technologies and simplified customs proceedings should be employed.

47. CETA, however, is a free trade agreement and not a customs union. This means that **customs checks** regarding the origin of goods or regarding the compliance with standards are still necessary. The EU imports more than nine times as much from the United Kingdom than from Canada. CETA does not consider the **mutual recognition** of regulations. Exporters must show that their products conform to the regulations in the destination country. In addition, CETA does neither include comprehensive rule for migration nor for services, in particular passporting rights for the financial sector.

48. An important question regarding the final agreement is how a “hard border” can be avoided, which could involve **border controls between Ireland and Northern Ireland**. The EU views this as a prerequisite for a final agreement, as this would be needed in order to preserve peace in Northern Ireland. Repre-

sentatives from the United Kingdom agreed on this. According to both the Chequers plan and the Super Canada proposal, technical solutions should replace border controls. Moreover, a "hard border" would not be necessary, provided a comprehensive agreement on tariffs and trade is found. For the case that no technical solutions are found and no follow-up agreement is made, the EU demands that the final agreement includes a backstop. This is still subject to negotiations and remains an open question, though.

49. In case a Brexit can no longer be avoided, a follow-up agreement should be found that **minimizes the damage** for both sides (GCEE Annual Report 2016 item 289). This should be targeted to as much openness as possible, avoiding "cherry picking" regarding the four freedoms. None of the existing free trade agreement of the EU with other regions meets these criteria. Therefore, a **comprehensive agreement** that includes rules for trade in goods and services as well as migration could be the right way. It would also consider issues regarding foreign policy, security policy and defense policy. Negotiations regarding Brexit should not be mixed with the general discussion about location policy. Debates in recent months often focused on attracting companies and public institutions.

BREXIT: KEY MESSAGES

- If possible, preventing Brexit and creating legal clarity for the possibility of a reversal
- Avoiding a disorderly Brexit, but preparing for its possible effects
- Negotiating an agreement for the United Kingdom that is as comprehensive as possible – without allowing cherry picking

2. Focusing the EU on its European added value

50. Brexit will cause the EU budget to lose around 8 % of net revenue and require a **reorganisation of the EU's finances**. Depending on the deal, the United Kingdom will probably still have to make contributions to the EU after Brexit (GCEE Annual Report 2016 items 324 ff.). However, the fact that the EU's multiannual financial framework will have to be renegotiated for 2021-2027 could be seen as an opportunity to focus it on **European added value**. This will require reinforcement of the principle of subsidiarity in allocating tasks, and matching reorganisation of the EU's financial resources, as well as more efficient use of the EU's Cohesion and Structural Funds.

Reinforcing the principle of subsidiarity

51. The German government's coalition agreement (Federal Government, 2018a) contains a general commitment to strengthening the EU financially and making more funds available. However, it would make more sense to **define** the **main areas** first in which the EU should assume additional or larger tasks, and only then to calculate the resulting financing needs. The **EU**'s expenditure should generate **added value** relative to financing from national sources. The principle

of subsidiarity should thus be strengthened and the EU should focus on tasks that are better placed at supranational level due to increasing economies of scale or positive or negative externalities, taking into account heterogeneous political preferences (GCEE Annual Report 2016 items 331 ff).

This added value is questionable in the case of some of the expenditure items in the current budget. It does not make sense to shift additonal tasks or competencies onto the European level, which deliver little or no European added value. New tasks, which trigger **significant distributional effects**, require stronger democratic and constitutional legitimization, than what is achievable in the current union of member states. They require the creation of a political union.

52. European added value is immediately apparent in areas such as the common Single Market and competition policy, foreign trade, climate protection, financial market supervision and the Capital Markets Union (GCEE Annual Report 2016 item 336). Public safety in the broader sense, infrastructure and basic research are areas that also fall under this category but in which the EU could expand its competencies and resources.

– A common approach in **foreign policy** and **development aid** would be advisable given the low weight of each individual member state. Large economies of scale and potential for efficiency increases call for a bundling of resources in the area of **defence policy.** It would make sense, particularly in the Schengen Area, to shift the **protection of external borders** as well as **migration and asylum policy** to the European level. **Combating international crime and terrorism**, including money laundering, also requires a cross-border approach.
– The development of a **European infrastructure,** e.g., in the area of electricity grids, would likely result in positive externalities for the member states. However, the concrete design must be rooted in the principles of subsidiarity and efficiency in reaching the desired objectives. Implementing the **digital EU Single Market** also falls under infrastructure. ↘ ITEM 143 Supporting **basic research** would also bring positive external effects for the member states.

53. There are also areas in which the EU employed **too many resources** in the past compared to their European added value, including, for example, the **common agricultural policy** (CAP). Direct payments to farmers currently comprise around 72 % of CAP spending. These represent income support, which could, however, be achieved in a more targeted and efficient manner via national social security systems (Weiss et al., 2017). As the payments are linked to the size of the farmland, farmers in the highest income decile receive around 55 % of direct payments (Cramon-Taubadel, 2017).

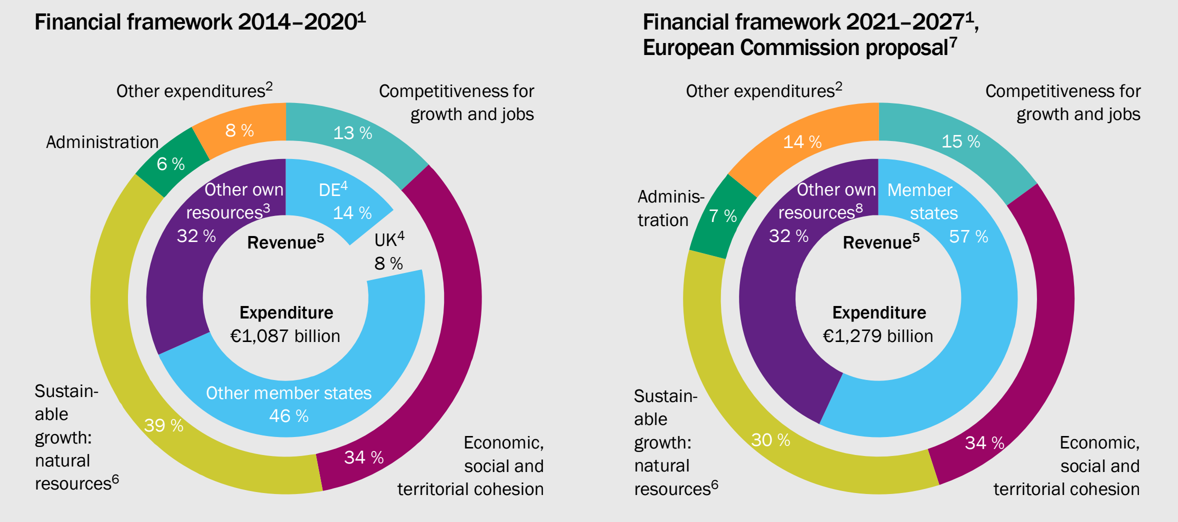
Arguments such as the **safeguarding of food supply** or environmental protection (Cramon-Taubadel, 2017) cannot justify payments on this scale either. For instance, the European Court of Auditors (2017) determined that the direct payments linked to environmental practices (greening) include a high level of deadweight loss, and has likely been ineffective as the conditions imposed largely correspond to normal agricultural practices.

54. The multiannual financial framework proposed by the European Commission (2018h) at the start of the negotiations for the period 2021-2027 involves only minor changes in the shares of several expenditure items. ↘ CHART 8 However, the new budget at current prices should be compared with the previous budget excluding the expenditures for the United Kingdom. This comparison indicates that nominal expenditures would increase across all spending items with the proposed budget. (van Deuverden, 2018). Revenues are intended to be increased via raising the ceiling of own resources and introducing a basket of new (categories of) own resources. These may involve a share based on national revenues from EU-ETS or a contribution based on the respective Common Consolidated Corporate Tax Base (CCCTB) (BMF, 2018).

While the change in proportions of the spending items was a step in the right direction, the negotiations for the next financial framework would be an opportunity to make more fundamental changes to the EU budget. This should involve disclosure of **conflicting objectives** (Heinemann and Cramon-Taubadel, 2017).

55. Germany and France committed to a **euro area budget** in the Meseberg Declaration (2018). Its stated objective is to promote "competitiveness, convergence and stabilisation" in the euro area through "investment in innovation and human capital". In principle, increased commitment of the EU in these areas is compatible with the focus on European added value if national spending is discontinued. However, there are already various European budgets

↘ CHART 8
EU budget expenditure and revenue



1 – Expenditure for the total framework (outer ring). 2 – Migration and border management, security and defence, the neighbourhood and the world. 3 – Traditional own resources (mainly custom duties), surplus and other revenue. 4 – DE-Germany, UK-United Kingdom. 5 – Revenue in 2014 or in 2027 (inner ring). 6 – Agriculture, development of rural areas, fishing, environment and climate action. 7 – Budget proposal from 2 May 2018. 8 – Own resources based on the common consolidated corporate tax base, on auctioning revenues of the EU Emissions Trading System, on non-recycled plastic packaging waste, on a simplified value added tax and on traditional own resources (mainly custom duties).

Sources: European Commission, own calculations for the pursuit of these objectives. For one thing, it is questionable how the new budget will compare to the support provided by the Cohesion and Structural Funds. These financial means are actually already earmarked for investment to adjust competitiveness and convergence in the EU. The European Fund for Strategic Investments (EFSI), part of the Juncker Plan, is also intended to promote investment in the EU. Moreover, the relation to the EU budget as a whole is unclear, if after Brexit some 85 % of the EU's economic output is generated in the euro area, and supervision by the European parliament actually extends to the entire EU budget.

According to the background paper to the Meseberg Declaration by the German and French finance ministers, the budget for the euro area is also intended to perform a macroeconomic stabilising function. Two options are discussed in this regard; firstly, a temporary moratorium of contributions to the budget, and secondly, an unemployment reinsurance scheme. Both options have similarities with the fiscal equalisation mechanisms discussed in ↘ ITEM 70.

More effective use of Cohesion and Structural Funds

56. Around a fourth of EU expenditure is attributable to the **Cohesion and Structural Funds** (including the European Regional Development Fund (ERDF), the European Social Fund (ESF) and the Cohesion Fund). Principally, it is in the interest of the EU to support economically weaker regions as is also prescribed in the EU treaties. However, the resources have **widely differing effects** across regions. In some regions the structural funds have apparently had a very positive impact, but in others none at all (Breidenbach et al., 2018).

In many predominantly poorer regions available funds are not even absorbed in their entirety. In the current multiannual financial framework covering the period between 2014 and October 2018 61 % of the available financial means in the cohesion and structural funds have been allotted to projects and of those only 19 percentage points have actually been paid out (Europäische Kommission, 2018i). Reasons include the late start of the current payout period, a lack of financial means for co-financing and insufficient resources in administrative authorities. A reduction in bureaucracy for applications, processing and monitoring associated with EU projects could help the funds to be paid out. However, increased absorption of EU funds should not come at the expense of their effectiveness. For example, the European Court of Auditors (2018) estimates an **error rate** of 3.7 % for reimbursement-based payments for budget year 2017.

57. There are **currently seven transitional regions** in Germany (per-capita GDP larger than 75 % and smaller than 90 % of the EU average), which will receive a total amount of around €10 billion from the various EU structural funds between 2014 and 2020. According to the latest GDP figures, only two of these regions (Mecklenburg-West Pomerania and Saxony-Anhalt) would still be eligible for funding, and **only one would be after Brexit** (Mecklenburg-West Pomerania). Some €9 billion will be paid to developed regions of Germany (per-capita GDP larger than 90 %) between 2014 and 2020.

Therefore, it is not due to the Brexit that only one or two regions in Germany will receive higher payments from the structural funds for transitional regions in the next financial framework but rather due to **Germany's economic success**. Furthermore, it should be questioned whether highly developed regions in the EU should **receive EU funding at all**, or whether this is at odds with the objective of the funds. After all, the funds' stated objective is to support the economic convergence of poorer regions in the EU. In the richer regions, this support is likely to crowd out public tasks which should rather be assigned to national or local policy making. This would violate the principle of subsidiarity.

58. **Instead** of following an approach of **indiscriminate, all-round distribution,** there should be a stronger relation between the allocation of funds and EU tasks that exhibit a European added value, as well as the objectives of the European programmes. If the funds were granted in a **targeted** manner, considerable benefits could be achieved even with what is a relatively small EU budget compared to EU economic output. One way of creating a stronger connection between the allocation and usage of resources is to link the payments to specific projects in connection with the country-specific recommendations made by the European Commission (GCEE Annual Report 2016 item 38).

The European Court of Auditors (2018) also criticises the current procedures in project selections. Rather than basing selection on the expected outcomes, the primary aim seems to be achiving a high **take-up**. Therefore, it is hardly possible to evaluate to what extent provided funds actually contribute to achieving EU objectives. A major problem is that the monitoring of the funded projects starts late or uses unsuitable indicators for assessing the results.

EUROPEAN UNION: KEY MESSAGES

- Reinforcing the principle of subsidiarity in the EU and focusing on European added value
- Aligning financial resources to the so defined tasks of the EU, e.g., more for public security, infrastructure, and basic research
- Allocating payments from the structural and cohesion funds not indiscriminately, but rather based on the objectives of the funds, especially the objective of economic convergence

3. Economic stability in the euro area

59. To ensure long-run economic stability in the euro area, on the one side the ECB would need to manage succesfully the transition to a normal monetary policy. On the other side, governments of member states would need return to sustainable fiscal policies. Past reforms going into the right direction (Maastricht 2.0) should be maintained and further steps should be taken along these lines to strengthen the institutional framework of the european monetary union (GCEE annual report 2012 items 174 ff.; GCEE Annual Report 2013 items 269 ff.). The design of European institutions should follow the principle of subsidiarity, and take **incentive problems** into account while preserving the **alignment of liability and control**. A crucial precondition for a further development of the

institutional framework of monetary union is that no European government question its membership in the union or its rules. The current behaviour of the Italian government impedes an increased European integration.

Fiscal and monetary policy: Creating scope for action in future crises

60. The current favourable state of the economy in the euro area should be used to consolidate public budgets, to create fiscal space for future crises and to normalise monetary policy. However, ECB monetary policy remains very expansionary despite a considerable increase in inflation. In fact, the degree of monetary accommodation has increased further during the first half of the year. ↘ ITEM 347 Though the ECB expects to end the net purchases of bonds by the end of the year, it runs the risk that the turnaround in monetary policy will come too late and occur too slowly. ↘ ITEM 361 FF. This could lead to higher than expected inflation, misallocation of credit, investment and capital, and greater risks to financial stability.

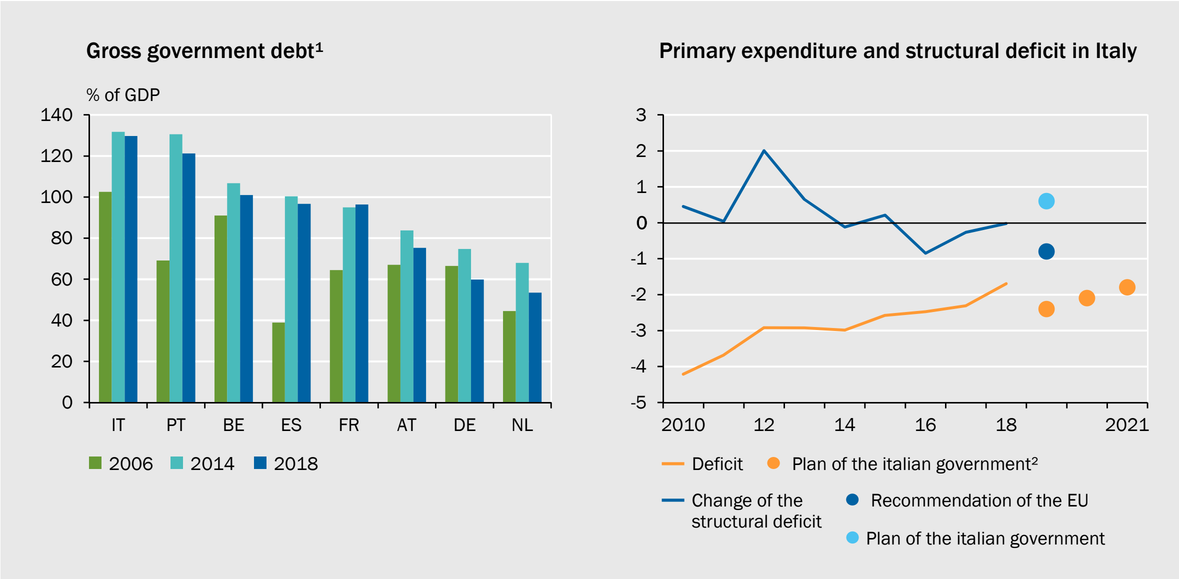
The German Council of Economic Experts has therefore presented a **strategy for policy normalisation** (GCEE Annual Report 2017 items 358 ff.). The ECB for their part should publish a strategy for normalising monetary policy in order to avoid upheaval on financial markets. A more symmetrical response to macroeconomic developments would be appropriate. It would also be advisable to develop the forward guidance further towards a Governing council forecast of the central bank rates and balance sheet. Furthermore, it is time to develop and communicate a strategy for reducing the size of the central bank balance sheet. ↘ ITEM 375

61. The good economic situation in many euro area member states calls for a reduction of still high government debt levels. ↘ CHART 9 LEFT This would create additional scope on the member state level for responding to future country-specific shocks. Institutional reforms to **strengthen and to improve enforcement the European fiscal rules** could support this objective. ↘ BOX 1 The current discussion with respect to Italy's budget plans reveals some weaknesses of the present rules, which could be curbed by reform.

62. In mid-October 2018, Italy submitted its draft budget for 2019 and 2020 to the European Commission for assessment as part of the European Semester. In the European Commission's view, the **expansion of the deficit and government spending** planned by the **Italian government** deviates significantly from the Commission recommendations passed unanimously (including Italy) in July of this year (Dombrovskis and Moscovici, 2018). ↘ CHART 9 RIGHT

One of the main areas of dissent is the level of future growth in **(potential) economic output**. This is a key figure in the calculation of the structural deficit and the assessment with respect to the compliance with the European fiscal rules. The crucial question is whether the Italian government's additional spending will, as the government claims, increase (potential) growth. Forecasts and estimates of these variables, especially in real-time, are subject to high

↘ CHART 9
Debt levels of selected member states and budget in Italy



1 – IT-Italy, PT-Portugal, BE-Belgium, ES-Spain, FR-France, AT-Austria, DE-Germany, NL-Netherlands. 2 – According to the Italian budget for the year 2019 in the context of the European Semester.

Sources: Eurostat, IMF, own calculations

uncertainty (GCEE annual report 2016 Box 6). However, a correct assessment of compliance with the existing fiscal rules depends substantially on this. A reformed set of fiscal rules could mitigate the importance of any possible estimation errors occurring in real time by capturing forecasting errors in an adjustment account and adjusting for them within a given timeframe. ↘ BOX 1

63. In the **further process of the European Semester**, the European Commission presented its first own assessment of the budget draft at the end of October and stated that it is at odds with the provisions of the jointly adopted recommendation of July 2018 (European Commission, 2018j). The European Commission has therefore requested Italy to present a revised budget within three weeks. However, the European Commission has no executive powers to enforce a compliant budget in Italy.

Instead, in the ongoing process of the European Semester, at the end of November, it will give a **final assessment with respect to compliance with European fiscal rules** of the given budget at this time and will give a **recommendation** to the Council of the European Union on the possible launch of an Excessive Deficit Procedure. It has to make this recommendation when a Member State exceeds the reference values for the deficit or the debt ratio and no **exceptions** are granted. It has to be noted that, in principle, violations of the threshold for public debt can only be determined on the basis of realized data (European Commission, 2018k). In the case of the deficit limit, however, this can already be done on the basis of plans and forecasts.

64. Conditions for exceptions have been greatly extended under past reforms of the Stability and Growth Pact and have been granted to Member States without adequate ex-post review. For example, the European Commission has granted Italy a total of six exceptions for different areas since 2012. A reformed set of

rules should **reduce the number of** such **exceptions** and limit them only to natural disasters and severe recessions, so that these rules can exert a stronger binding effect. ↘ BOX 1

65. Taking into account the opinion of the Economic and Financial Committee and a hearing of the Member State concerned, it is then up to the ECOFIN Council to decide on the beginning of **a formal procedure** to correct an excessive deficit. If this is the case, the Council **makes explicit recommendations** for the correction of the excessive deficit and gives Member States up to six months to implement them. If the European Commission arrives at the assessment that the Member State concerned has not taken effective action within the time limit, the ECOFIN Council can only prevent sanctions by a qualified majority.

However, this sanctioning mechanism had little deterring effect in the past, either because the Council did not impose a sanction or imposed formal **sanctions** of 0% of GDP. Against this background, a reformed set of rules should opt for greater automatism and exclude zero sanctions. ↘ BOX 1

↘ BOX 1

Reforming the European fiscal framework

Various reforms in recent years have made European fiscal rules increasingly **complex and opaque** (GCEE Annual Report 2017 items 95 ff.). **Many exceptions** further reduces their effectiveness. Effective mmonitoring by the public is therefore almost impossible. Moreover, the European Commission has been acting increasingly in a political manner which has further weakened the binding effect of the rules. While the member states complied with the rules in formal terms, the rules were not sufficiently effective to reduce public debt ratios and prevent **procyclical fiscal policy.**

The reform proposal outlined in the Annual Report 2017/18 is described in more detail in Feld et al. (2018). This proposal contains an **expenditure rule** as the central rule for the assessment of annual compliance, which is in line with a number of other reform proposals brought into the debate (Andrle et al., 2015; Claeys et al., 2016; Bénassy-Quéré et al., 2018; Darvas et al., 2018; EFB, 2018). This rule is intended to ensure an almost balanced budget over the economic cycle. To achieve this, in principle, primary public expenditure excluding cyclical unemployment expenditure should grow more slowly than nominal potential output over the medium term. Moreover, in member states with **high debt ratios,** public expenditure should only be allowed to increase at a comparatively **slower** rate.

Unlike other reform proposals, the structural deficit rule is maintained as a **medium-term target** by means of an adjustment account. As this rule permits a slight deficit, the fiscal space is less restricted than in other, similar proposals. The proposal specifically acknowledges the problems of real-time estimates. Therefore it includes the revisions to the structural deficit into the adjustment account. If, in subsequent years, it emerges that the deficit rule necessitated a tighter or looser fiscal policy, the threshold will be altered accordingly. This is operationalised by means of the expenditure rule, which is adjusted to account for past entries in the adjustment account. This will ensure that, particularly in good times, fiscal buffers are created. The adjustment account would also make measurement errors in other areas visible. For example, expenditure rules would require estimating discretionary changes in revenue, which also typically involves estimation errors.

Unlike the current frameworkt, the expenditure rule outlined here is largely acyclical (Christofzik et al., 2018). The structural deficit rule which is at the heart of the current framework and has been transposed into national legislation by the Fiscal Compact, is also acyclical in theory, but requires a precise, real-time estimation of the output gap. However, this is nearly impossible (GCEE Annual Report 2016 Box 6). Moreover, the measurement errors reveal a systematic bias towards lower figures such that the acyclical nature of the structural deficit rule is not guaranteed (Darvas et al., 2018). It has thus proven to be an unsuitable operational rule for the annual assessment of fiscal policy.

An expenditure rule that, as proposed by Feld et al. (2018), constrains an acyclical residual of expenditures allows automatic stabilisers to react freely. Thus, it is better suited to making the framework in its entirety acyclical. In comparison to other variables such as tax revenues, overall spending has a relatively low sensitivity to cyclical changes. The cyclical subcomponents average approximately 1.0 % of GDP across the EU28 and therefore comprise only a small share of the total (Christofzik et al., 2018).

Maintaining the structural deficit rule in the medium term can preserve another of its conceptual strengths. A system that would only consist of an expenditure rule and a debt rule could not reliably prevent a procyclical fiscal policy in a period of increasing capacity utilisation, and would run the risk of being underspecified (Christofzik et al., 2018). In addition, adhering to a medium-term structural deficit target results in stronger harmonisation of national and supranational fiscal rules. Including this rulem which is already stipulated in the Fiscal Compact, ensures that the intended refocusing, simplification and strengthening of the current fiscal framework would not require any amendments to European or inter-governmental treaties.

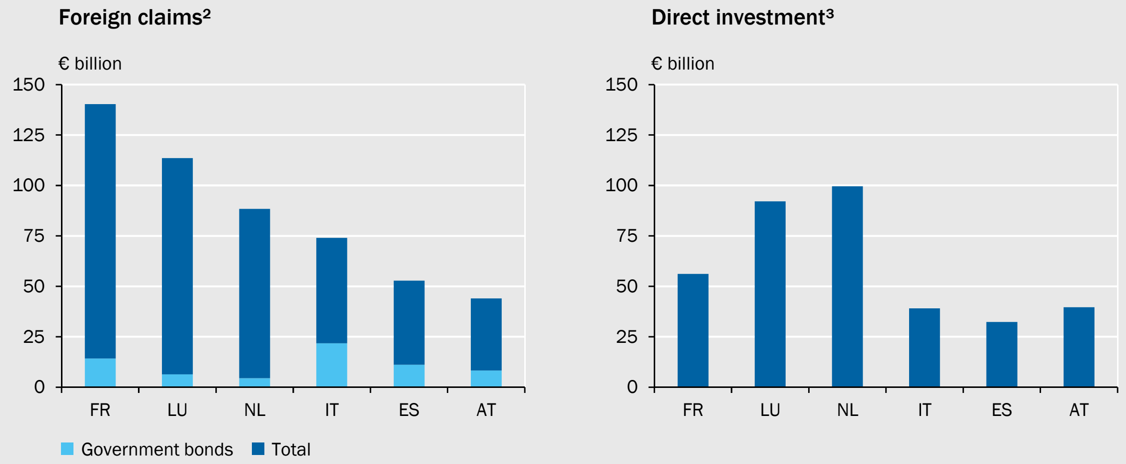
Some reform proposals call for caps on expenditure growth to be set by independent fiscal councils (Bénassy-Quéré et al., 2018; Darvas et al., 2018). However, this is currently problematic given the big differences in design and, in particular, the insufficiently ensured political independence (von Trapp et al., 2016). If independence cannot be guaranteed, fiscal councils would be faced with the same moral hazard problems, as do the institutions entrusted with enforcing the rules in the current system.

Except for natural disasters and severe economic crises, the reformed fiscal framework would work largely without exceptions or special cases. This would considerably increase transparency. Rule enforcement would be improved if the determination of violations of the rules and the level of the penalty were more automatic, as given in this proposal, although the final decision should still be made by the Council of the European Union.

66. The reactions observed on capital markets in response to the statements made by Italian government officials, for example regarding the formation of the government or budget drafts, make clear that the markets do not fully trust Italy's commitment to euro area membership. ↘ BOX 10 This has led to extensive discussions about the impact of a **large Member State leaving the euro** area. The analyses regarding Brexit illustrate how much uncertainty is attached to the estimates of the economic consequences of leaving the common market. ↘ ITEM 38 FF. If a country left the Monetary Union, the consequences for Member States would in all likelihood be even greater.

An estimation of the economic consequences or the risks of losses for Germany would be largely speculative. Even the claims of German banks or direct investments in the respective Member States ↘ CHART 10 or the Deutsche Bundesbank's TARGET2 claims ↘ BOX 6 do not provide a complete picture of the risk of losses. Potentially even more serious **are indirect and long-term economic consequences**.

↘ CHART 10
Germany's exposure to selected euro area member states



1 – FR-France, LU-Luxembourg, NL-Netherlands, IT-Italien, ES-Spain, AT-Austria. 2 – Claims of German banks including their foreign branches and subsidiaries against the repsective member states in the BIS consolidated banking statistics (CBS). Data as of end of June 2018 3 – Claims from foreign direct investment relationships with the respective member state. Data as of end of December 2016.

Source: Deutsche Bundesbank

Stabilization in the Euro Area

67. The considerable **increase of risk premia on Italian government bonds** is a sign of existing **market discipline.** ↘ BOX 10 PAGE 240 The Italian government has triggered these developments by its own actions and its confrontational rhetoric. Stabilizing Italy and avoiding contagion would best be achieved if Italy turned towards growth-oriented structural reforms and fiscal consolidation (AR 2017, items 397 pp.). The long-lasting, weak economic development in Italy (AR 2017 item 234) is characterized much more by structural weaknesses than by a temporary drop in demand. Therefore, **supply-side reforms are needed** instead of fiscal stimulus. Pension policies that worsen the sustainability of public finances in the long-run are particularly problematic.

68. Should the Italian government stick to its confrontational course, the **situation could culminate in a crisis**. If a member state runs the risk of losing market access, the **ESM** serves **as** a **crisis mechanism**. Upon request and conditional on the acceptance of a macroeconomic adjustment program by the member state it will provide loans at significantly more favorable terms than the market. In addition, an ESM program qualifies the member state, to purchases of government bonds under the OMT program by the ECB. Under the adjustment program, an applicant member state would then have to pursue policy reforms and fiscal consolidation. Conversely, **unconditional access to fiscal means would be counterproductive**. Such policies would undermine market discipline and increase the scope for a counterproductive conflict strategy of the government of a Member State even further.

69. The objective of current **proposals to reform the monetary union** is to improve risk sharing between member states. This comprises in particular the fiscal backstop of the Single Resolution Mechanism, the European Deposit Insur-

ance Scheme, the evolution of the capital markets union and a fiscal capacity at European level. These proposals should not only be reviewed with regard to the stabilizing effects they may have but also in the light of current developments. ↘ ITEMS 409 FF.

70. A **fiscal capacity** at European level could assist member states that experience a particularly adverse economic development with temporary fiscal transfers. Numerous proposals link the payment of temporary transfers to the development of the unemployment rate. ↘ ITEM 431 In fact, union-wide monetary policy can only react to heterogeneous economic developments in the member states to a limited extent. **National fiscal policy** and particularly automatic stabilizers, play an important role in stabilizing country-specific developments. ↘ ITEMS 426 Prior to creating a fiscal capacity to compensate for the lack of exchange rate flexibility and the lack of national monetary policy in a monetary union, it is the task of fiscal and economic policies at member state level. A large economic literature has suggested a number of corresponding policy instruments that member states can deploy within their own responsibility. ↘ ITEM 407 FF.

71. Undisputedly, the condition of fiscal sustainability sets a limit on public debt and thereby on the range of fiscal policy in a member state. The fiscal rules of the monetary union provide incentives to maintain this sustainability. Beyond that, only general **transfers into the budget** of a member state that do not have to be repaid could increase the state's fiscal space. However, this option has been excluded on purpose under the regulatory framework of the monetary union. These transfers would imply permanent redistribution between states. The creation of such a **transfer union** would **requires** a complete **renouncement of sovereignty** of the member states with regard to their budgetary policies. Indeed, federations like the United States have a significantly higher level of risk sharing through inter-state fiscal transfers than the European Union. ↘ ITEM 441 FF. Yet, borrowing conditions at member state level are drastically limited, to the point of requiring a balanced budget.

72. Against this background, the **temporary nature of a fiscal capacity with insurance character** is of great importance. Present proposals do not aim to establish lasting redistribution between member states. Even so, most of them **do not require explicit repayment** and reasonable interest rates. Instead, they rely on randomness to serve as balancing principle: Transfers are to compensate for random, asymmetric shocks. Each member state can be hit by such shocks at different times such that payments balance over a longer period of time. Shocks are assumed to be exogenous events that are not triggered by government action.

However, such shocks are difficult to identify. Hence, proposals that use the unemployment rate as the trigger for transfers are problematic. The cause of a change in the unemployment rate has to be identified. To this end, the unemployment rate has to be decomposed into its structural and cyclical components. **Evaluations are needed** to check whether concrete proposals for a fiscal capacity result in **substantial net transfers** from one state to another over a longer term.

73. Such evaluations are largely missing. An exception is the analysis by the International Monetary Fund (IMF), which suggests that such a capacity would have led to large and sustained net transfers assuming that the capacity had already been in place during the years from 1990 to 2017 (Arnold et al., 2018). An analysis by the German Council of Economic Experts shows that even if a longer period of time is considered, it would not have implied an automatic averaging out of temporary transfers. ↘ ITEM 433 FF. Establishing a fiscal capacity that has such effects would imply introducing a **transfer union through the backdoor**. If the fiscal capacity had a borrowing capacity as well, this could be interpreted as an introduction of a Eurobond.

74. Furthermore, it is being discussed whether the ESM should be turned into a **European Monetary Fund (EMF)**. This term, however, can be understood quite differently. In any case it is misleading, since even a reformed ESM, in contrast to the IMF, would not be responsible for the stability of the monetary and payment system. From the point of view of the GCEE, the ESM is an essential element of architecture of the Euro Area, which should be **developed further into the right direction**: the reformed ESM should allow for an orderly restructuring of public debt, provide a fiscal backstop for the SRF and receive an explicit mandate on crisis prevention, for example in the form of additional tasks in monitoring national economic policy and stability risks (AR 2017, items 124 pp.). The statement of Meseberg (Federal Government 2018b) takes up these points. It also proposes a framework for liquidity coverage in case of liquidation/restructuring ↘ ITEM 507 FF. and the further development of existing precautionary instruments (ESM credit line).

75. The explicit design of such a credit line is still open. However, it is supposed to be equipped with ex-ante access criteria, be granted only to "economically and financially sound Member States", and not require a full program on the spot. Similar to the IMF, the ESM already has a **Precautionary Conditioned Credit Line (PCCL)**, which would be further developed. The aim would be to provide Member States with these loans in the event of imminent liquidity shortages, thus stabilizing expectations in the financial markets and thus avoiding a crisis (Regling, 2018).

However, the question arises why this credit line would be needed at all. If a member state loses access to capital markets, there already is the possibility to raise funds under an ESM program. As long as the member state has access to capital experts and is expected to meet stringent criteria for a reformed PCCL, a PCCL request would likely send out negative signals to financial markets and would therefore probably not occur.

76. Establishing an additional **fiscal capacity**, as suggested by various institutions and considered as part of the budget of the Euro Area in the Meseberg Declaration (2018), could also allow the circumvention of an ESM program. Transfers would not be subject to the same conditionality as implied by an ESM program. Thus, there is a danger that member states delay the return to sound fiscal policies for a longer period of time. Moreover, it may set the wrong incentives and induce moral hazard.↘ ITEM 407 FF. Transfers would possibly allow member states

to pursue labor market and structural policies which might appear politically opportune but would lead to more unemployment. Before the implementation of proposals, evidence should be provided that concerns about moral hazard can be addressed by the recipient governments. For example, it would be possible to shift costs of increased unemployment and lack of national structural reforms to the EU level through a **union wide unemployment insurance scheme.** ↘ ITEM 451

Even in the case of a **reinsurance system**, as e.g. envisaged by the Federal Government in the context of the Meseberg Declaration, there would be a risk of misdirection, as a sclerotic labor market tends to increase the persistence of negative shocks. This could lead to transfers from the common funds that exceed the deductible (GCEE annual report 2017 item 106). Therefore, the introduction of such a system requires the harmonization of national labor market policies and institutions and a certain renouncement of sovereignty by the member states. At least for the time being, this is incompatible with heterogeneous national preferences and the principle of subsidiarity.

77. By contrast, credit and factor markets, in particular capital and labor markets, play an important role in stabilizing **asymmetric shocks**. ↘ ITEM 407 However, possible **effects of stabilization** are currently hindered by institutional barriers and regulation. In order to improve means of stabilization on credit and factor markets, it would be necessary above all to move forward with regard to the banking and capital market union at European level. ↘ ITEMS 475 F.

Above all, stabilization through labor markets takes place via wages, monetary transfers and intra-EU labor mobility. While migration of workers can offset supply bottlenecks and create local demand, remittances stabilize domestic demand in other EU member states. ↘ ITEM 407 However, the Euro Area has not yet reached its full and effective free movement of workers in the sense of an optimal currency area (van Rompuy, 2012). The tightening up of the Posting of Workers Directive, as decided last year, is more than a step backwards. It is directed against the freedom to provide services in the common internal market (AR 2017 item 138).

Advancing Banking Union and Capital Markets Union

78. Credit and capital markets can significantly contribute to **risk sharing in the monetary union**. For this reason, an important long-term goal is the **removal of obstacles to financial integration** in Europe. This concerns financing via banks and capital markets. In this regard, the European Banking Union and the Capital Markets Union play a crucial role. However, progress has been limited so far. ↘ ITEMS 478 FF. Due to current developments in **Italy**, **the integration efforts** have **received a set-back**. If a member state explicitly or implicitly questions membership in the euro area, the willingness of the other member states to embark on further integration steps is reduced. Nevertheless, further steps would be reasonable in order to permanently stabilize the monetary union.

79. The most important objective of the European Banking Union, established in 2014, is to ease the sovereign-bank nexus (European Commission, 2012). Substantial progress has already been made with the **Single Supervisory Mechanism (SSM)** and the **Single Resolution Mechanism (SRM)**. However, the **sovereign-bank nexus persists**. Many banks continue to hold large claims against their domestic states, which is favoured by regulatory privileges. With regard to the third pillar of the Banking Union, the European Deposit Insurance Scheme (**EDIS**), **no agreement** has yet been reached.

80. The **termination of regulatory privileges for sovereign exposures** is important to limit contagion effects from member states to their domestic banks. For this purpose, the introduction of risk-adjusted large exposure limits with a risk-adequate capital requirements would be reasonable, as already proposed by the German Council of Economic Experts in 2015 (GCEE annual report 2015, paragraphs 57 ff.). Alternatively, concentration charges could be considered as long as they **take into account** the **creditworthiness** of the respective debtor. In order to mitigate competition effects in the international environment, well-diversified portfolios could be exempted to a certain extent from capital requirements. However, contagion risks could increase if the incentive is set for banks to hold more foreign government bonds. ↘ ITEMS 488 FF.

81. At the Euro Summit in June 2018, heads of state and government agreed to introduce a **fiscal backstop** for the **Single Resolution Fund (SRF)** (Council of the European Union, 2018). Accordingly, the ESM should provide a credit line to the SRF. Details on the design are announced for December 2018.

In principle, such a backstop is **reasonable**, and its governance should be designed in such a way that it can be activated without great delays. However, given the great discretionary leeway for using the SRF, it must be ensured that it **does not allow for bail-outs through the back door**. In addition, a resolution procedure should not only ensure the solvency, but also the liquidity of an institution in resolution. The creation of a **liquidity facility for banks in resolution**, which would allow the ECB to provide these banks access to liquidity, could be beneficial. The resulting default risks could be covered by a guarantee provided by the SRF. However, the **timely intervention** of the supervisor and the resolution authority is equally important, so that resolutions are not unnecessarily delayed. ↘ ITEMS 502 FF.

82. A **common European deposit insurance scheme** could be reasonable, under the condition that it is designed in an **incentive-compatible** way, for example in the form of a reinsurance system with bank- and country-specific premiums. An introduction, however, requires other reforms that **further reduce risks** in the euro area, such as adequate risk provisioning for existing and future non-performing loans, and a swift build-up of bail-inable debt buffers. Above all, **the termination of regulatory privileges** for sovereign exposures is a **mandatory prerequisite**. ↘ ITEMS 511 FF.

83. In addition to the deepening of the Banking Union**, barriers to financial integration should be removed** that unnecessarily complicate cross-border mergers. In particular, the standardization of regulation and supervision should

be strengthened by reducing national options and discretion. Financial integration is especially strengthened through **branches and subsidiaries of foreign banks**, without having to expect an abrupt decline in times of crisis. ↘ ITEM 535

84. The **Capital Markets Union** seeks to develop and integrate the European capital markets in order to reduce the strong dependence of companies on banks. **Strengthening resilient forms of financing**, especially in the form of equity, should be considered as a priority. As an internal market project, the Capital Markets Union is a **long-term project** involving many detailed and lengthy legislative initiatives. ↘ ITEM 557 Nevertheless, given its great potential, the Capital Markets Union should be vigorously pursued.

85. A certain degree of **harmonization of insolvency law** and the **equal tax treatment of debt and equity** are essential elements. ↘ ITEMS 553, 553 Investment funds are expected to play an important role in advancing financial integration, but their rapid development has to be accompanied by regulatory action.

In addition, the **competencies** of the European Securities and Markets Authority (**ESMA**) should be **extended** to ensure a consistent implementation of regulation and to reduce regulatory arbitrage. Nevertheless, in some areas it could be reasonable to maintain the national competencies. In particular in the light of Brexit, the EU should **avoid** a **fragmentation of capital markets** due to the possible creation of several financial centres. Finally, measures should be taken to increase the supply of capital, for example by **strengthening private and occupational pension systems** with the help of a Pan-European Personal Pension Product (PEPP) across Europe and by improving financial literacy. ↘ ITEMS 552 FF.

EURO AREA: KEY MESSAGES

- ↘ Normalisation of monetary policy in the euro area with symmetric reaction to macroeconomic developments, balance sheet reduction and communication of normalisation strategy
- ↘ Reduction of public debt ratios to create fiscal space, supported by reformed fiscal frameworks; avoidance of long-term transfers without giving up national sovereignty
- ↘ Further advancement of the Banking Union and Capital Markets Union, in particular termination of regulatory privileges for sovereign exposures and reduction of barriers to integration

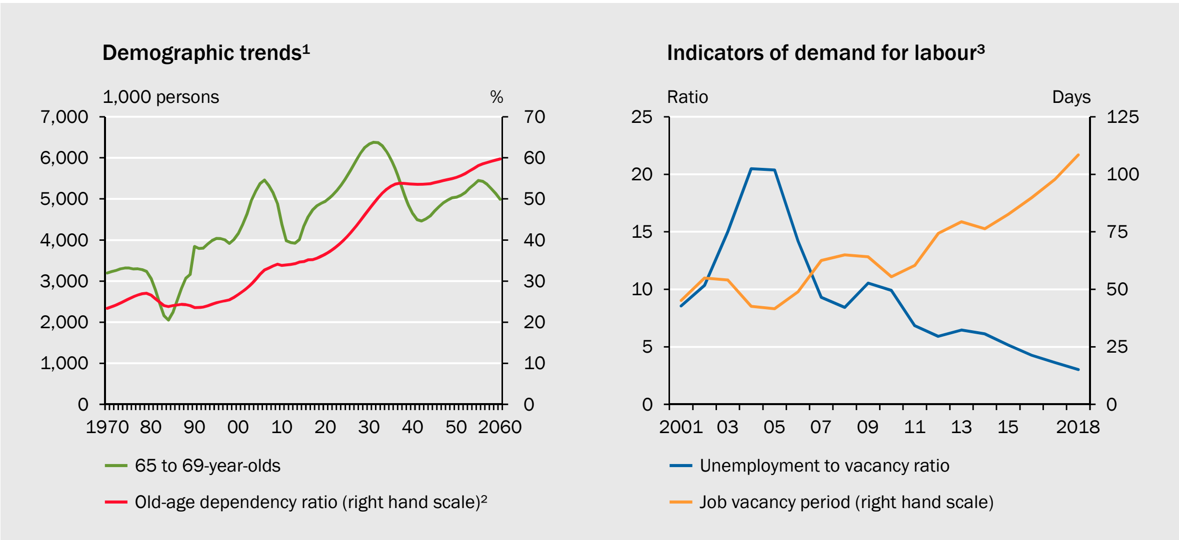
IV. DEMOGRAPHIC CHANGE: URGENT NEED FOR ACTION

86. Demographic change will bring changes in almost all areas of economic policy at the national level. The combination of the drastic decline in the birth rate since the 1970s and an increasing life expectancy has led to an **ageing population** in Germany. The recent rise in the birth rate and high net migration figures have done little to change this. Germany approaches the end of a decade-long **demographic stagnation**. As a result of the low birth rate during and after World War II, the number of individuals between 65 to 69 years of age amounts to below 5 million for the period from 2009 to 2020, which is lower than the preceding and following years. ↘ CHART 11 LEFT

Now, however, the **baby-boomers** (born between 1955 and 1969) are **on the brink of retirement age**. The number of 65 to 69 year olds is set to reach record proportions of 6.4 million by 2031, following the low of 3.9 million in 2013. The ratio of those 64 years of age and older to people of working age between 20 and 64 will likely rise from 35 % in 2015 to almost 50 % in 2030 and around 60 % in 2060. ↘ CHART 11 LEFT

87. The labour force should therefore be expected to decline considerably over the next few years. Furthermore, demographic change is also inflicting pressure on the pay-as-you-go **funding of the social security system**. The existing surpluses in most areas of social security are of a volatile nature. It requires strengthening the demographic solidity of the social security system. The current demographic stagnation and the economic upswing offer **good conditions for reforms** to strengthen growth and economic sustainability.

↘ CHART 11
Demographic change in Germany



1 – According to the 13th coordinated population forecast of the Federal Statistical Office, Variant G2-L1-W2. 2 – Ratio of the population aged 65 and older to the population aged 20 to 64. 3 – Moving average of October of the previous year to September of the current year.

Sources: Federal Employment Agency, Federal Statistical Office

1. Labour migration against skilled labour shortages

88. The working-age population aged 20 to 64 is already shrinking by around 300,000 people per year due to demographic change (Fuchs et al., 2018). However, the high level of net migration and further rising labour force participation rates have thus far helped the working population and labour volume to continue to grow. Despite the significant increase in employment this year by around 590,000 people, many employers are still seeking skilled employees. The **number of official vacancies has reached a record high** at over 800,000 in September 2018. The same holds for the length of vacancies which measures the time span from the desired start date to the cancellation or filling the job vacancy. During the period from October 2017 to September 2018, this time span has roughly doubled over the comparable period in 2010 to almost 110 days. At the same time, the unemployment to vacancy ratio has decreased significantly. While for one open job vacancy there were ten unemployed in September 2010, there were only three unemployed in September 2018.↘ CHART 11 RIGHT

Using and increasing labour force potential

89. An initial approach to reduce the rising skilled labour shortages is to try to make better use of the domestic labour force potential. The framework should be structured in such a way that part-time workers can **increase their working hours** more easily and have an easier way to return to the labour market, for example, after parental leave. A flexible work organisation and further expansion of full-day childcare would be necessary.

In addition, as of January 1, 2019, employees not only have the right to reduce their working time, but to increase it after a certain period to full-time work. This **right for part-time workers to return to full-time work** applies to all employees in companies with more than 45 employees (BMAS, 2018a). In principle, such a possibility could postpone the return to full-time employment (GCEE annual report 2017 item 777). However, such incentives should be modest, because the time to return is limited to one to five years.

90. In order for workers to be better able to balance their individual work requirements and their personal lives, the **Working Hours Act** should be modernized. Many employees often operate in a legal gray area if they opt for a flexible organization of their working hours and thereby fail to comply with the legal minimum rest period of eleven hours. Conditional on the agreement of both, employers and employees, it may be reasonable to shorten the minimum rest period (GCEE annual report 2017 item 78). In addition, an adjustment from a 48-hour daily limit (GCEE annual reprt 2017 item 78), as proposed in the EU Working Time Directive, could help workers **distribute** their **working time more flexibly** over the days of the week.

These new regulations must not lead to a hidden expansion of working time. In order to prevent malpractices, particular obligations to document the working time are required. Nonetheless, flexibilisation can help some groups to reconcile work and family life, thus extending working hours, and counteracting skills shortages through an adaptive organization of work.

91. A second approach aims at increasing domestic labour force potential. One element of this approach is the further **increase in labour force participation**. Already in recent years, the participation of women and older people has increased significantly. As a result, the employment rate of older workers aged 55 to 65 increased from 45 % to 70 % between 2005 and 2017, and from 63 % to 75 % for women over the same period. Albeit on a decreasing scale, there is still scope for expanding female labour force participation.

A further increase in female employment could, for example, be achieved through fiscal policies consistent with changes in institutional general framework conditions (GCEE annual report 2017 items 33 ff.). Instead of withdrawing older workers from labour force potential at an early age with policies such as the pension at age 63 for long-term insured, efforts should be made to allow for a **more flexible retirement**. ↘ ITEM 109

92. Unused labour force potential is also among the unemployed which currently amount to around 2.3 million. In September 2018, nearly 800,000 people were registered as unemployed for more than one year and were therefore considered long-term unemployed (BA, 2018). Among other things, policies aimed at providing tailor-made advice and **intensive care for the long-term unemployed** should be targeted (Hohmeyer et al., 2015). In particular, efforts should be made to prevent the emergence of long-term unemployment from the outset by using preventive policies, for example through targeted retraining adults without a professional qualification.

93. Participation in a state-subsidized **social labour market** should only be proven to benefit the long-term unemployed far from the labour market. Lietzmann et al. (2018) suggest that the criteria for such a target group should be at least seven years of receiving unemployment benefits and having a low participation rate during that period. The GCEE is any case skeptical regarding a solidary basic income, as it is tested in Berlin from 2019. This policy provides full-value state-funded jobs for a fraction of the long-term unemployed. It recalls active labour market policies of the 1990s and 2000s such as the job creation schemes. A number of studies have documented that these job creation schemes are associated with lower success rates of integration into the labour market for participants than for comparable non-participants (Hujer et al. 2004; Caliendo et al., 2003, 2004; Kraus et al. 2000).

94. In order to make the most out of the domestic labour force potential, **barriers to entry into the labour market** should be kept as low as possible. In recent years, however, a contrary movement has been observed. The reform of the temporary employment in 2017 states that a temporary worker has to earn the same wage as the permanent workforce after nine months. Furthermore, the maximum term of employment with a temporary employment agencies is now limited to 18 months.

Moreover, the Coalition Agreement provides for a significant restriction of fixed-term employment. On the one hand, successive contracts are to be abolished and a total duration of **fixed-term contracts with the same employer** should not exceed five years. This is likely to create friction, especially in the public sector, where, in 2014, around 11 % of all workers had a significantly higher fixed-term rate. In the private sector, however, the share was just over 7 % (Hohendanner et al., 2015). It is highly questionable whether this pressure leads to permanent contracts among the employees with long-term successive contracts. This is especially true in the public sector. Overall, shorter firm-specific work tenure might be the result of this policy.

On the other hand, the Coalition Agreement intends for a reduction in the maximum duration of **fixed-term contracts with non-material reasons** (*sachgrundlose Befristung*) from 24 to 18 months. Furthermore, the proportion of such contracts relative to the workforce are planned to be limited to a maximum of 2.5% for employers with more than 75 employees. According to Hohendanner (2018), this quota system would result in at least 360,000 contracts to be reduced or converted. The proposed regulation could cause employers to refrain from hiring. In addition, the proportion of fixed-term contracts with material reasons is likely to gain importance in the future as well as alternative instruments of staff adjustment, such as temporary and contracts for work.

95. The negative effects of the policies adopted and planned are unlikely to be significant in the current good economic environment. However, they could become **negative in times of economic downturn**. The flexibility then needed in the labour market might be limited by these policies.

Further advancing migration of skilled labour

96. Even a substantial increase in domestic labour force potential will not be enough in the long term to stop the decline of the labour force. A **permanent high level of migration** will therefore likely be **essential in order to secure prosperity in Germany**. Therefore, migration should be embraced by politics and the necessary strategy should be clearly communicated. It is particularly important on the domestic scale to strengthen the acceptance of migration and to establish a culture of integration. This should ideally include imposing a stricter requirement on migrants to complete language and integration courses. Therefore such courses should be made available more broadly.

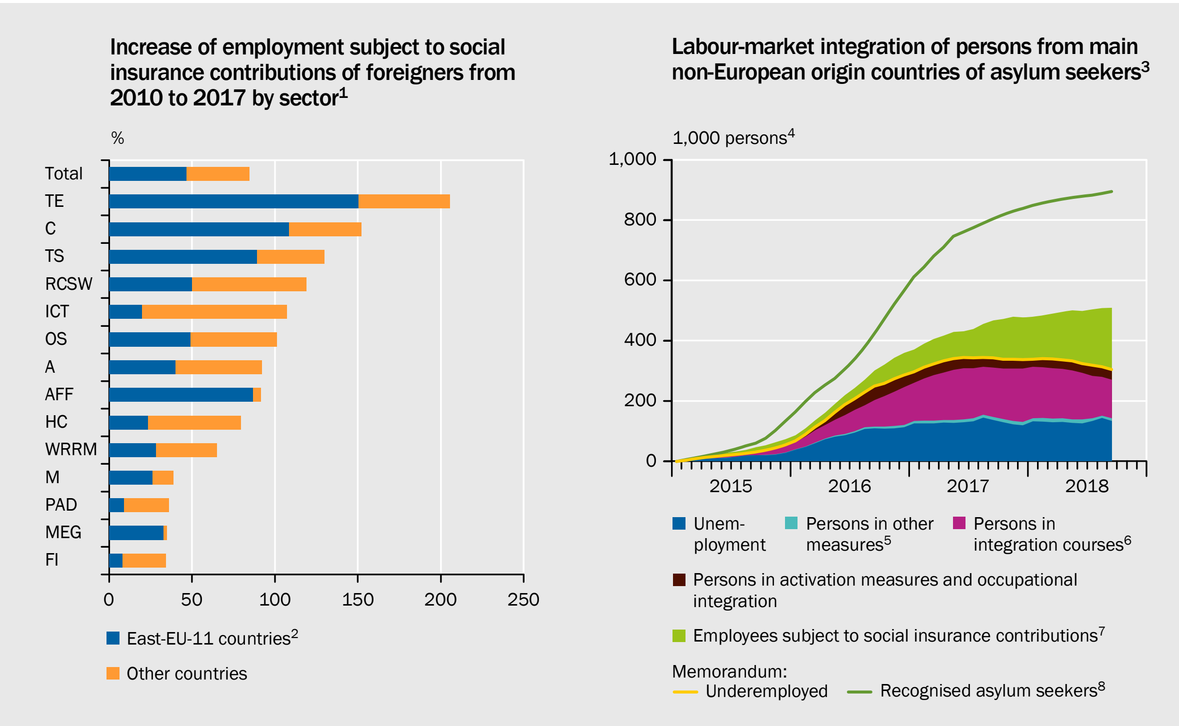
97. **Migration is playing an increasingly important role** in the labour market. The number of foreign workers subject to social security contributions increased by 85 % between 2010 and 2017, to around 3.5 million people. Foreign workers are now contributing more than half of the growth in employment subject to social security contributions. ↘ ITEM 285 The number of employed foreigners increased in all economic sectors, but primarily in temporary employment and construction. ↘ CHART 12 LEFT

The majority of these migrants originated from eastern European EU countries, which enjoy free movement of labour. If, however, the economic conditions in these countries improve, migration from there may decrease and larger numbers of previous migrants might return to their home countries. During the last two years **immigration from EU member states has already been declining**.

98. In the future, it would be even more important to increase labour migration from non-EU member states. Germany already has relatively liberal rules in place on labour migration for academic professionals from non-EU member countries (Expert Council of German Foundations on Integration and Migration, 2015). However, there are still major hurdles to migration for workers with professional training but no academic qualifications. The GCEE welcomes the efforts of policymakers to lower these hurdles by the planned **Skilled Workers Immigration Act** (*Fachkräftezuwanderungsgesetz*).

Instead of only allowing skilled workers from third countries to enter the German labour market conditional on having a job offer, it should be possible to allow job seekers with appropriate skills and language abilities **temporary residence permits**. In addition, it is planned to waive from a priority review, in which it is necessary to check whether a domestic candidate is also available for a job, and to remove existing limitations to bottleneck occupations.

↘ CHART 12
Development of labour migration in Germany



1 – As of 30 June. TE-temporary employment, C-construction, TS-transportation and storage, RCSW-residential care and social work activities, ICT-information and communication, OS-other services, private households, real estate, professional, scientific and technical services and other commercial services, A-accomodation, AFF-agriculture, forestry and fishing, HC-health care, WRRM-wholesale and retail trade and repair of motor vehicles and motorcycles, M-manufacturing, PAD-public administration and defence, compulsory social security, extraterritorial organisations, education, MEG-mining, electricity, gas, steam and air conditioning supply and water supply, waste management, FI-financial and insurance activities. 2 – Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia. 3 – Citizens of Afghanistan, Eritrea, Iraq, Iran, Nigeria, Pakistan, Somalia and Syria. 4 – Absolute change over January 2015. 5 – E.g. job opportunities and measures to encourage self-employment. 6 – In particular, integration courses and occupation-specific language courses. 7 – For August and September 2018: GCEEE forecast. 8 – From all countries of origin with the exception of non-re-cognised but tolerated asylum seekers.

Sources: BAMF, Federal Employment Agency, own calculations

99. **Recognition of qualifications acquired abroad**, however, continues to pose a major obstacle to immigration, especially against the background of the German (vocational) education system. It would be conceivable in the case of a binding job promise to individuals with completed training to carry out simplified competence tests.

100. **Asylum seekers** should **still be strictly differentiated from labour migrants**. Those seeking asylum do so for humanitarian reasons, and should therefore not be subject to labour market criteria. However, these criteria are decisive for labour migration. Overall, there were around 60,000 people who were obliged to leave the country under an enforceable decision in June 2018 (German Bundestag, 2018). Tolerated individuals, however, whose number totaled to around 170,000 in the same month, should not be denied access to the labour and vocational training market. It is already legally possible for such migrants to obtain permanent residence if they are well integrated and approved by their employer.

101. **Integration of recognised asylum seekers** into the labour market is progressing at a faster pace than in previous decades, and thus **more quickly than expected** (Annual Report 2016 Box 24; Annual Report 2017 items 744 ff.; GD, 2018). While in its economic update in March 2016 the GCEE forecasted additional 110,000 people from the eight largest non-European asylum countries Afghanistan, Eritrea, Iraq, Iran, Nigeria, Pakistan, Somalia and Syria to being employed between 2015 and 2017, the actual number was at around 140,000 people. In July 2018, the number of employees subject to social security contributions from these countries amounted to around 180,000 more than in January 2015. ↘ CHART 12 RIGHT

Their employment rate increased to 22 % in July 2018 compared to 15 % in the same month of the previous year. However, it was still well below those of foreigners with 43 % (Federal Employment Agency, 2018). Almost one in six employees subject to social contributions from these countries is working in **temporary employment** (Federal Employment Agency, 2018a). In the past, this sector has served as a good stepping stone for other employment arrangements for most groups of foreigners (Jahn, 2016).

102. Underemployment has already peaked among asylum seekers from the eight largest non-European countries of origin. ↘ CHART 12 RIGHT The transition for individuals from these countries from having completed integration- and occupation-specific language courses to employment subject to social security contributions seems to be successful in many cases. Since the beginning of 2017, the number of unemployed individuals from this group has been at a relatively constant level of around 130,000 compared to January 2015. ↘ CHART 12 RIGHT The **major integration efforts** of recent years seem to bear fruit. However, they should not ease.

SHORTAGE OF SKILLED WORKERS AND MIGRATION: KEY MESSAGES

- Better opportunities to increase working time of part-time workers and flexibility in work organization and working times, as well as full-day care
- Raise labour force participation through low labour market hurdles, flexible retirement and fiscal measures to increase female employment
- Increase of professionally qualified immigration, especially from non-EU countries, through a Skilled Workers Immigration Act

2. Demographically aligned pension system

103. The introduction of old-age pension at the age of 67 was the **right political response to demographic change**. It was forward-looking to increase the statutory retirement age in advance. First of all, this is the case because the public debate did not have to be conducted with the emotionality typically associated with abrupt, major changes. Second, it was possible to increase the statutory retirement age in a piece-wise fashion. This avoids sudden changes.

Moreover, it was successful, in conjunction with the second and third pillar of the old-age pension system, to shape the current system **demographically aligned** until the **year 2030** without questioning its basic structure (GCEE Annual Report 2016 items 590 ff.). It was a proper move to increase the attractiveness of the fully-funded pillars, for example through the Occupational Pensions Act (*Betriebsrentenstärkungsgesetz*) of 2017.

104. Currently, politicians are facing a similar problem, because **demographic change** will not rest by 2030. Fixing the statutory retirement age will increase the average benefit period of the pension automatically. The financing of the social security system, thus, becomes very difficult with a decreasing number of contributors. This is unaffected by the possibility of using federal subsidies, because the tax burden, as well as higher contribution rates, mainly affect the young, economically active generation.

105. Under the current legislation, the contribution rate and federal subsidies to the statutory pension scheme are continuously increasing, whereas the net replacement rate, which relates pensions to average income, is decreasing. ↘ CHART 13 A declining **net replacement rate** does not at all mean that pensions are falling in absolute or real terms. It only indicates that pension payments are growing **more slowly than wages** (GCEE Annual Report 2016 items 560 ff.). Pension cuts, however, are excluded since 2009 (GCEE Annual Report 2016 item 579). Additionally, higher pension entitlements are acquired as the statutory retirement age increases. The standard pension that is used to calculate the net replacement rate, in contrast, is based on 45 contribution years (GCEE Annual Report 2016 item 560). As a result, the net replacement rate underestimates the actual pension development as the retirement age rises.

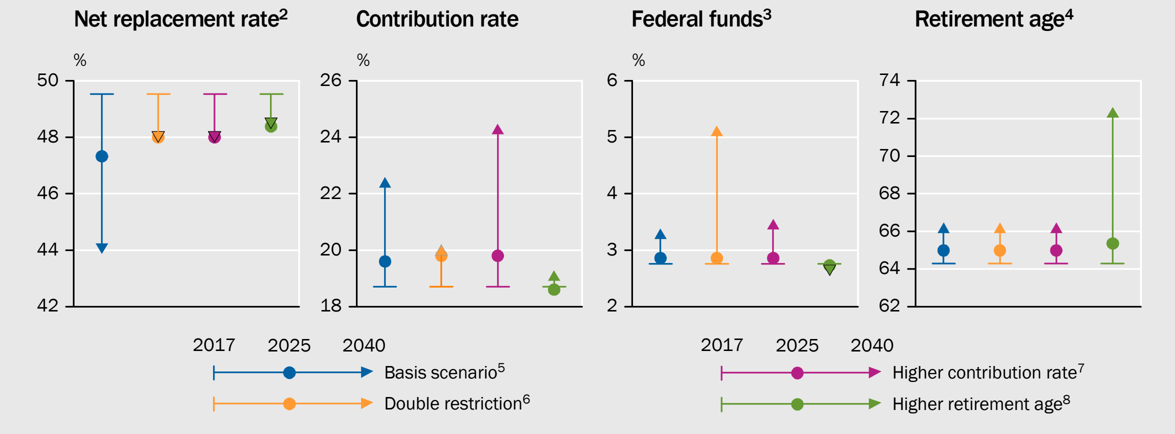
106. The Federal Government has decided to **set a floor for the net replacement rate and a cap on the contribution rate** (*doppelte Halteline*) (BMAS, 2018b). This is to keep the contribution rate below 20 % and the net replacement rate above 48 % by 2025. It is noteworthy that the double restriction was decided before the pension commission has presented results. The results of the analysis will be available by 2020. The current public debate further includes the stabilization of the net replacement rate at 48 % by 2040.

107. Based on an updated version of the sustainability analysis used in previous reports of the GCEE (GCEE Annual Report 2016 items 592 ff.; Werding, 2016), Professor Werding has simulated the effects of such a policy. In the **baseline scenario**, which reflects the current **status quo**, the net replacement rate would be below 48 % already by 2024. The contribution rate would exceed 20 % by 2028.

Keeping the net replacement rate at 48 % until 2040 would lead to a stronger increase of the contribution rate, if no other measures are implemented. Importantly, fixing both variables until 2040 would result in even higher federal subsidies compared to the current legislation. According to the simulation, the subsidies would amount to 5.1 % of nominal GDP by 2040. This is 1.8 percentage points above the baseline scenario. ↘ CHART 13 The tax rate could increase to compensate for the rise. However, this would increase the tax burden of future taxpayers.

108. Another option would be to increase the average retirement age. Without further adjustments, the retirement age would have to increase to 72.3 years. ↘ CHART 13 However, this does not seem to be a realistic option. A higher **level of qualified migration** will also not solve the problems of the pay-as-you-go system. Even if the migrants had proper qualifications, net migration should increase

↘ CHART 13
Simulations of effects of double restrictions (doppelte Haltelinie) on the national pension funds[1]



1 – Start in 2017: Net replacement rate 49,5 %, contribution rate to national pension funds 18,7 %, government grants 2,8 %, average retirement age 64,3 years. 2 – Net before tax, relation of average pension payment (45 earning points) to average income of contribution payers. 3 – Federal funds in % of nominal GDP. 4 – Average retirement age. 5 – Under current legislation. 6 – The net replacement rate should not decrease below 48 %, the contribution rate should not rise over 20 %, balance by federal subsidies. 7 – The net replacement rate should not decrease below 48 %, balance by contribution rate. 8 – The net replacement rate should not decrease below 48 %, balance by average retirement age.

Source: Updated version of the sustainability analysis by Professor Werding, based on Werding (2016) continuously to 1.5 million people annually by 2040. Higher **productivity growth** would, in turn, not affect the net replacement rate. The reason is that wages would increase simultaneously and the net replacement rate is related to wages. However, real absolute pension payments would increase. This makes it very clear that the discussion of the replacement rate is too narrow.

109. From the GCEE's point of view, it would to advisable to spread the burden triggered by demographic change equally in order to achieve a stabilization of the pension system. To do so, the **retirement age should be linked to future life expectancy**. Future increases in life expectancy would thus be divided between a longer benefit period and longer working life. Under current conditions, this would add up to an additional two-year extension of working time per additional three years of life expectancy. As a result, the statutory retirement age could increase to 71 years by 2080. A retirement age of 71 years would only apply to birth cohorts from 2009. Overall, this would be an important contribution to the stabilization of the system (GCEE Annual Report 2016 items 599 ff.).

This should be complemented with **further training** and better protection against a **reduction in earning capacities**. Moreover, it should be facilitated to work beyond the statutory retirement age. The extension of income limits as implemented by the Act on Flexible Retirement (*Flexirentengesetz*) is a step into the right direction. However, **policies** such as the retirement at the age of 63 for long-term insured or the mothers' pension I and II (*Mütterrente I und II*) are **counter-productive** and require sharper adjustments in the future.

PENSION SYSTEM: KEY MESSAGES

- Avoiding the double restriction for the contribution rate and the net replacement rate beyond the year 2025
- Flexibilization of the statutory pension age and linking it to higher life expectancy to avoid one-sided burden on younger generations
- Avoiding policies, such as the mothers' pension II, that aggravate the already existing sustainability gap at the expense of future generations

3. Residential property and its acquisition

110. Residential property is a central element of private equity and thus of private old-age insurance. Traditionally, Germany is a land of renters. One approach to improve financial security of an ageing society is promotion of **private capital formation**, particularly of private residential property. But real estate prices have been increasing strongly in past years. Likewise, rental prices for re-letting have risen distinctively, but much less so than property prices. One reason for this price increase is that specifically in congested areas, housing demand has grown stronger than supply. To encounter the resulting challenges for social policy, measures to **expand housing supply** are primarily indicated.

Expand supply of residential property

111. Mainly in German congested areas, an **increasing price trend** of residential real estate and rent offers can be observed. ↘ ITEM 660 Households in cities more and more have difficulties to find rental housing in compliance with their wishes or to acquire property, given their financial options. Central cause behind these price trends are demographic developments, foremost a strong influx of the population into the major German city districts.

From the strongly growing demand for housing in congested areas, **problems of social and housing policy** arise, as socially deprived households are particularly burdened by housing costs (Dustmann et al., 2018), and social segregation can be a consequence in some cities. ↘ ITEM 697 One important set screw to dampen demand for urban housing might be a better connection of the respective outer conurbation area to public transportation networks.

112. The most important lever yet lies in an expansion of supply. On the real estate market, supply cannot proximately adapt to demand, in particular due to the limitation of disposable building land in urban areas. Regulations such as rent control, which narrow the rise of rents, only approach the symptoms. Housing policy measures such as child allowance for property acquisition further fuel prices by trend. More appropriate **measures to expand supply** would be tax incentives and loosened regulation. An open debate on how the **trade-off** between provision of low-priced housing and ecological requirements can be dissolved is particularly indicated.

A constructive measure is to grant **housing allowances**, which as an instrument of promotion of subjects does not directly gear into market processes. The circle of beneficiaries is narrow though due to low income limits. ↘ ITEM 711 Concerning the **support of social housing**, mistakes of the past have to be avoided by arranging for social intermix, and by adapting the support to the income situation of renters contemporarily.

An expansion of supply is limited by disposable land. However, the **property tax** should not be embellished specifically to mobilize unused land. ↘ ITEM 727 In the upcoming reform, it is essential to weigh up arguments considering property value, e.g. in case of the land value tax, and potentially related segregation effect against each other. This speaks for a hybrid solution. ↘ ITEM 735

113. The acquisition of real estate by private households is hampered by high transaction costs. It would be conceivable to introduce a higher tax exemption for the **property transfer tax**. However, this requires a reform of the national financial equalization system in the effect of an assumed fictitious average tax rate for financial equalization of just below 3.5% rather than the average tax rate across countries. ↘ ITEM 749

114. Beyond that, **price developments** of housing property raise further questions for economic policy. An abrupt price decline would entail **macroeconomic risks**. Up to now, no nationwide price exaggerations have become apparent, but exaggerations cannot be ruled out in the major cities. ↘ ITEM 676

Credit volumes and private indebtedness still develop moderately. Therefore, acute risks from real-estate financing for **financial stability** do not seem to exist at the moment. ↘ ITEM 689 If property prices declined, however, noticeable losses for banks could be expected. In addition, interest rate risk has soared. Therefore, the activation of macroprudential tools should be considered, particularly as a delayed application of measures is to be feared. In addition, the availability of data on housing and commercial property should be improved and additional macroprudential instruments for real estate financing should be established.

Make private capital formation more flexible

115. Private households in Germany hold little average net wealth – overall capital less debt – in an international comparison (EZB, 2013). In addition, Germany stands out by **relatively strong wealth inequality** in international comparison (GCEE Annual Report 2016 figure 111). To measures inequality of wealth, the Gini coefficient is applied, taking on the value of 0 for absolute equality and the value 1 for greatest possible inequality. Germany in this regard lies on the level of e.g. Sweden and Switzerland, with distinctively above France, Italy or Japan, and below the United States and Denmark.

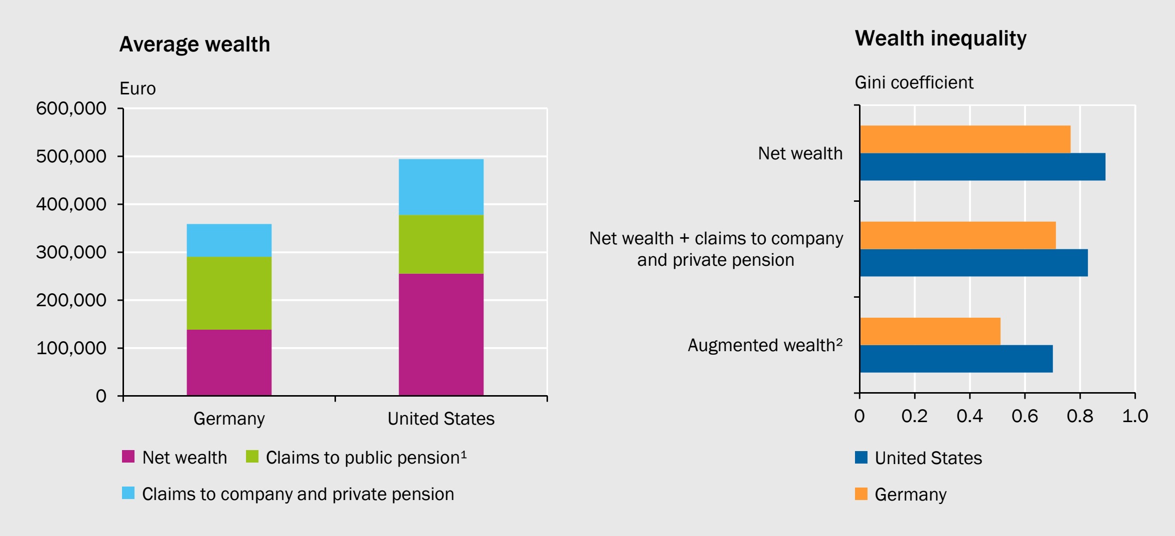
116. But the relatively little household wealth mirrors a number of national peculiarities. By the public pension system (first column of old-age security) **considerable claims from pension schemes** are established, which cannot be accessed during the employment period and thus are not formally counted as wealth position. When defining pension claims from the Federal Retirement Security as well as from company and private retirement plans as wealth components, this results in the concept of **"augmented wealth"**. In Germany, this quantity is twice as big as average net wealth. ↘ CHART 14 LEFT

In the **United States**, pension claims of private households play a considerably smaller role in comparison. While average net wealth in the United States is almost twice as large as in **Germany**, the relation of augmented wealth in the year 2012 amounts to the factor 1.4 only, that is 494 000 euros in the United States and 359 000 euros in Germany.

117. Beyond that, "augmented wealth" is **essentially less unevenly distributed** (Bönke et al., 2016, 2017; Peichl und Stöckli, 2018). Net wealth is distributed relatively uneven with a Gini coefficient of 0.77 in Germany and 0.89 in the United States. ↘ CHART 14 RIGHT Inequality of augmented wealth in Germany is 0.51 in contrast, what roughly corresponds with the Gini coefficient of the distribution of gross income, and is 0.70 in the United States. In Germany, the statistically reported wealth inequality declines more strongly in comparison by the inclusion of "augmented wealth".

118. Circumstances of wealth in Germany are thus strongly interwoven with extensive pension claims from the Federal Retirement Security (1st column), but also claims from company (2nd column) and private (3rd column) pensions. With the **company pension security**, the employer withholds a part of the salary to

↘ CHART 14
Wealth distribution of private households in Germany and the United States in 2012



1 – Gross present value of expected future pension entitlements. Without entitlements to survivor's pensions. 2 – Net assets plus claims to public, company and private pension insurance.

Sources: Bönke et al. (2017), own representation.

pay a pension to its employees after their employment period. Primarily larger companies can yield higher returns due to scale effects than the single employee; furthermore, for these companies costs of asset management and information search are lower (GCEE Annual Report 2016 items 580 ff.). On the one hand, this results in an additional **incentive for private provision**, on the other hand disposable income and individual freedom of saving decision are impaired.

119. Moreover, Germany exhibits in an international comparison a small share of households with residential property. In particular in congested areas, many households live in rented property (GCEE Annual Report 2016 box 28). The overall relatively **uncommon owner-occupied residential property** is reflected by average household net wealth. In this way, the self-imposed commitment to finance residential property can set an incentive for saving, which consequently increases private wealth.

120. Private capital formation in Germany is strongly coined by the public promotion of monetary asset formation. **Private capital formation** could be shaped more neutrally by an increased **freedom of choice**. An example in this connection could be the regulation of the Swiss model of old-age pension. Therein, it is possible to access or lend formed capital for financing owner-occupied residential property before the actual pension age is reached. ↘ BOX 21 PAGE 375

121. Since the year 2008 in Germany, the inclusion of owner-occupied residential property into the “residential property promotion” (**“Wohn-Riester”**) is allowed for by the residential property allowance. The Riester-Pension though suffers from low market transparency as well as sometimes poor consulting services (GCEE Annual Report 2016 items 643 ff.). Should improved information and transparency not increase its acceptance, the Riester-Pension could be strengthened by regulatory defined, non-public standard products with opt-out ar-

rangement (GCEE Annual Report 2016 item 645). One possibility for this would be a Pan-European Pension Product as discussed on a European level. ↘ ITEM 552

RESIDENTIAL PROPERTY AND PRIVATE CAPITAL FORMATION: IMPORTANT MESSAGES

- Expansion of supply by a reduction of regulation such as rent control; lowering transaction costs by a reform of the property transfer tax, encountering social segregation
- Opening of occupational pensions for acquisition of owner-occupied residential property
- Creation of additional macroprudential instruments and consideration to apply macroprudential measures

4. Strengthening competition in health care

122. Financial burden carried by financiers of the health care system is likely to increase noticeably in the future as a result of demographic change and medical-technical progress. The level of health care in Germany is high by international standards. Although the high capacities reserved for this have already been reduced in recent years, there is currently no other country in Europe with so many hospital beds per inhabitant and a longer average hospital stay. At the same time, hospital structure is characterized by many small and less specialized hospitals, so that in some cases operations are carried out in hospitals that do not have the necessary equipment. Such evidence points to **oversupply and misuse in the health care system** in various areas. ↘ ITEMS 801 FF.

123. Existing efficiency potential in the health care sector could be lifted, in particular through competitive elements. In the health insurance market, the **introduction of additional contributions** has promoted the switching of health insurance funds for insured persons and thus stimulated competition. ↘ ITEMS 830 FF. Additional contributions are a key element for the sustainable financing of the health insurance system, as it can be ensured that any deficits in statutory health insurance (SHI) are only compensated by additional contributions. By returning to the equal financing of the SHI by employees and employers on January 1, 2019, however, competition between health insurance funds could lose importance because workers will only have to bear half of the additional contribution in the future.

124. In order to fully transfer the existing income redistribution in the health insurance system into the tax system, additional contributions should be levied independently of income and not, as currently, income-related. The GCEE therefore reiterates its assessment that it would be useful to change the system towards a **citizen allowance** (***Bürgerpauschale***). For individuals with lower incomes, a social compensation to be financed by means of taxation would have to be provided for.

125. The service providers are likely to harbor considerable efficiency potential for limiting the expected increase in health expenditures. Especially in the inpatient sector, in many cases we currently observe **efficiency deficiencies**. Examples

are inadequate hospital needs planning, local political interests preventing the market exit of individual hospitals, or the obligation of health insurance funds towards plan hospitals to fully remunerate inpatient treatment of the insured even in case of quality defects.

126. The **structural adjustments in the hospital sector**, which are already ongoing, should therefore be rigorously pursued and capacities further reduced. ↘ ITEMS 858 FF. The Structural Fund introduced by the Federal Government is heading in the right direction, but should increasingly reduce hospital capacity in the future. Furthermore, as the Länder do not sufficiently meet their obligations to finance the investment costs of hospitals, the financing of operating and investment costs should be placed entirely with the hospitals, thus **shifting the hospital financing system from dual to monistic financing**. ↘ ITEMS 849 FF.

127. The contract market between health insurance funds and hospitals is currently characterized by collective agreements in which health insurance funds associations jointly and uniformly contract the foundations of care and benefits with the relevant organizations of the service providers. However, this severely restricts competition. A regionally differentiated loosening of the contracting obligation for health insurance funds towards hospitals and the associated option to agree upon **selective contracts** would give insurance funds the possibility of directing their insured specifically into those hospitals that meet quality standards, such as minimum amounts. ↘ ITEMS 864 FF. This could increase the pressure on low-quality hospitals. At least in agglomerated regions, the sufficient inpatient care would continue to be guaranteed due to the high hospital density.

128. Selective contracts also provide a means to more intertwine the outpatient and inpatient sectors. The extensive separation of these two sectors is currently a major obstacle to competition in the health care sector. It concerns, for example, requirements planning, remuneration, quantity control and quality assurance. Approaches that can improve **cross-sectoral care** have great potential to increase effectiveness in health care. ↘ ITEMS 870 FF. In view of the high barriers that exist, integrated care should be promoted especially at the outpatient-inpatient interface, such as emergency care.

129. Many of the professions experiencing **labour shortages** as listed by the BA are in the health care sector. Skilled labour shortage in this sector is likely to intensify in the coming years, particularly as the demand for health services is likely to increase with the aging of society and medical-technical progress. Shortages are expected to emerge particularly in care for the elderly, for which the BA (2018) already reports an extensive shortage of skilled staff. One reason is that the number of caregiving family members is on the decline. If suitable steps are not taken, then, according to model calculations, a discrepancy between demand and supply of up to 1.3 million people, measured in full-time equivalents, could be built up in the health and social service sector by the year 2030 (Augurzky and Kolodziej, 2018). ↘ ITEM 820

HEALTH CARE: KEY MESSAGES

- Reduction of high capacities and small-scale hospital structures through competitive elements and structural adjustment in the hospital sector
- Financing health insurance funds through non-income-related additional contributions and development of the health insurance system into a citizen allowance with social compensation
- Conversion of hospital financing from a dual to a monistic system and expansion of cross-sectoral care

V. DIGITALISATION: EMPOWERING PARTICIPANTS, SEIZING OPPORTUNITIES

130. It will be almost impossible to fully compensate for the decline in the volume of work caused by demographic change. Productivity growth must therefore increase to maintain the growth path of income per capita. This can only succeed through net investments in productive capital and through innovations. Even though **digitalisation** has only had a **modest impact on productivity development** so far, it is seen as a potential driver of productivity in the future. Adjustments to a regulatory framework and investments in education and infrastructure are necessary to raise the potential of digitalisation.

131. The analysis of the effects of **digitalisation** is complicated because of incomplete or missing **data** and difficulties in **measuring** macroeconomic variables (EFI, 2018). This is in particular true for services which hardly incur costs for the users or whose benefits are not reflected in the price. Significant changes of products and accelerated growth of quality pose new challenges to the measurement of prices (ZEW, 2018a). Therefore, the collection of digitalisation-related data and the conceptual evolution of official statistics should be promoted.

1. Welfare-enhancing technological progress

132. One of the key findings of economic research is that **technical progress** makes the most **important contribution to the economic growth** in the long run (Solow, 1957). The current public debate discusses digitalisation as the most recent feature of **technological progress**. Dating digitalisation back to the commercialization of the Internet in the 1990s, the introduction of microprocessors or the first computer in the 1970s, or even earlier, shows that it is a process that has been going on for a long time. Current developments, for example “Industry 4.0” or machine learning, could considerably leverage the process. However, the potential disruptive nature of digitalisation has intensified the public debate about its impact on the labor market and society.

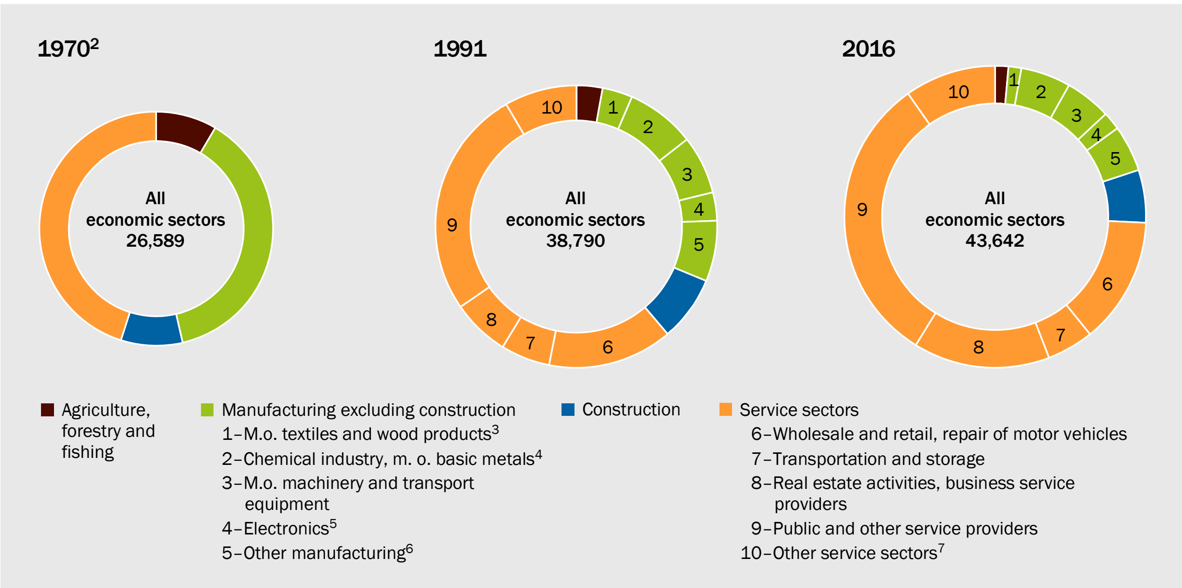
133. Technological progress has the potential to bring about **profound changes in the economy and society**. Major innovations in the past such as the steam engine and electricity led to a complete overhaul of production processes, the labour market and society. Such general purpose technologies (Bresnahan und Trajtenberg, 1995) affect broad sections of the national economy and have the potential to transform many economic and social structures from a single area. Digitalisation, thus, makes it likely to bring about changes for workers at all skill levels and for companies in almost every sector of the economy.

134. The economy and society have always been able to **adapt repeatedly to new technologies**. In total over the long run, more new jobs have been created due to the changes than have been lost as a result (GCEE Annual Report 2017 items 746 ff.). Dauth et al. (2018) do not find negative employment effects of automation and use of robotics in Germany over the past two decades. This is due to the fact that job losses in the manufacturing sector were offset by job gains in the services sector. Digitalisation has created new **jobs** in areas that were **unfathomable** before or even at the time when the technology was introduced.

This is an important reason why estimates on the effects of digitalisation are associated with much uncertainty. However, it is undeniable that technological change in combination with international trade integration, will cause a **shift in jobs** to other professions and sectors ↘ CHART 15 and that there will be a fundamental change in the activities needed in the market.

↘ CHART 15

Employment in Germany by economic sector[1]
1,000 persons



1 – Persons in employment (domestic concept). As classified in the national accounts. Economic sectors are partly comparable, due to methodical breaks in the Classifikation of Economic Activities, edition 2003 (WZ 2003) for 1970 and edition 2008 (WZ 2008) for 1991 and 2016. 2 – Former Federal territory. 3 – M.o. textiles, wearing apparel, leather products and shoes; m.o. wood products, paper and printing. 4 – M.o. coke and refined petroleum products; m.o. chemicals and chemical products; m.o. rubber, plastic, glass and ceramic products and related articles; m.o. basic metals; m.o. fabricated metal products, except machinery and equipment. 5 – M.o. computer, electronic and optical products; m.o. electrical equipment. 6 – Mining and quarrying; m.o. food products and beverages; m.o. tobacco products; m.o. furniture and other goods; maintenance and repair of machinery; electricity, gas, steam and air conditioning supply; water supply; waste management and similar sectors. 7 – Accomodation; information and communication; financial and insurance service providers.

Sources: Federal Statistical Office, own calculations

135. Whereas around 25 % of the working population was employed in the agricultural sector in 1950, this had fallen to 8 % by 1970 and just 1.4 % in 2016. The proportion employed in the manufacturing industry also fell from 43 % to 24 %. The sectors experiencing the largest decline in workers since 1991 are “construction” (-1.8 percentage points) and “mechanical engineering” (-1.2 percentage points). The opposite is true of the share of workers in the service sector, which grew from 33 % in 1950 to 74 % in 2016. The largest increases in employment figures since 1991 were recorded in “freelance and technical service providers” (+2.6 percentage points) and the “healthcare service” (+2.6 percentage points) sector.

Efforts to **empower** the population to be better able to take advantage of the opportunities of digital transformation should be of high priority (GCEE Annual Report 2017 items 810 ff.).

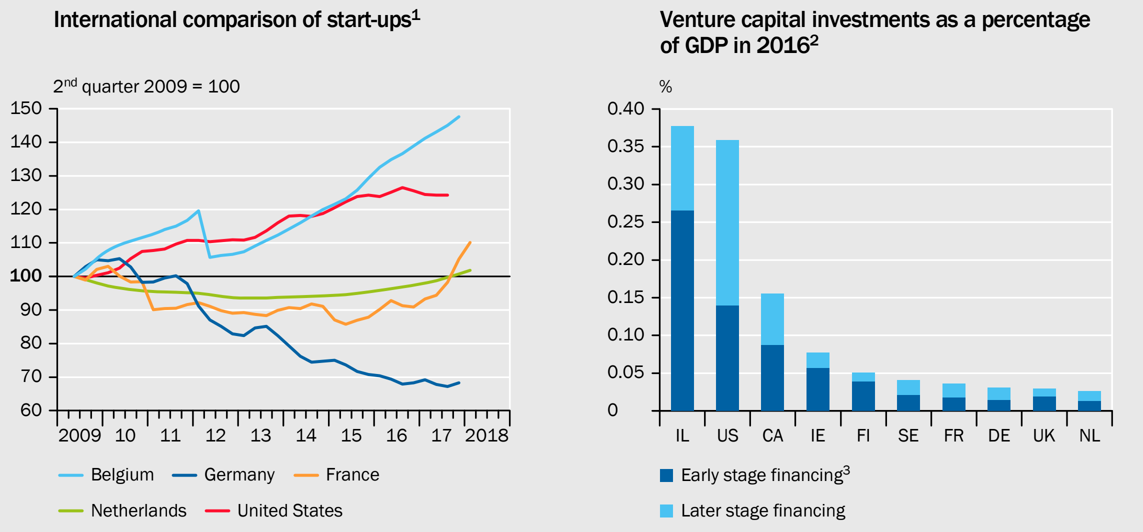
136. In the past, technological progress also resulted in substantial **productivity growth**. It is uncertain whether this will be the case with digitalisation, particularly given that the increase in macroeconomic productivity has actually slowed in Germany in recent years (GCEE Annual Report 2015 items 590 ff.) A major reason for this slowdown is attributable to the integration of workers with low productivity into the labour market since 2005 (Elstner et al., 2018). Moreover, technological progress in ICT-intensive sectors has had a positive effect on both production and employment in Germany. This indicates that the net effect on productivity is modest (Elstner et al., 2018).

However, it has been proven extremely difficult thus far to estimate the effects of digitalisation on (future) macroeconomic productivity. Even the most important new technologies in the past initially have had only a moderate effect on productivity growth (Crafts, 2003). If technological change accelerates overall, digitalisation may have the potential for greater increases in productivity in the future. A necessary prerequisite for efficient adaptation and the use of the resulting opportunities are, however, the **right economic framework** for companies, employees and consumers.

137. In the course of technological change and in particular digitalisation, new companies challenge established ones. **Start-ups** contribute to a large extent to productivity growth (GCEE Annual Report 2015 items 680 ff.) and employment (Criscuolo et al., 2014; Huber et al., 2017). Compared to OECD-countries, Germany, however, places in the lower part of the distribution for firm entry (EFI, 2018). ↘ CHART 16 LEFT

Reasons for the low number of firm entry may be related to economic, labour market and demographic factors (GCEE Annual Report 2017 items 682). Similarly important are, however, strict **regulations** and **bureaucracy**. This starts with restrictions on research and innovation and continues with **high tax burden** and **low social esteem** for entrepreneurship. Although capital, research and entrepreneurs are available in Germany, companies are often founded abroad.

↘ CHART 16
Indicators of start-up activity



1 – Index of numbers of enterprises with one employee, minimum. 2 – IL-Israel, US-United States, CA-Canada, IE-Ireland, FI-Finland, SE-Sweden, FR-France, DE-Germany, UK-United Kingdom, NL-Netherlands. 3 – Includes seed stage, start-up stage and early stage.

Sources: OECD, own calculations

138. According to a survey of young enterprises, the repatriation of bureaucratic burdens and reporting obligations announced in the coalition agreement could reduce one of the biggest obstacles of firm foundations (Bitkom, 2018a). However, it would be advisable to additionally improve the **tax system**, the start-up and corporate financing as well as the **education system**, not least, to improve the image of the entrepreneurship (GCEE Annual Report 2015 items 683).

In the Global Entrepreneurship Monitor (GEM, 2018), Germany is ranked 42nd out of 54 countries worldwide in entrepreneurship education. Additionally, only 38% of the German population between 18 and 64 years of age report that they have the skills and knowledge to start a business. In the United States, this number is 54% and the global average is 49% (GEM, 2018).

139. Compared to international standards, a further obstacle is the low availability of **venture capital** for young companies. ↘ CHART 16 RIGHT However, increasing the volume across the board with public funds does not appear to make economic sense. There is a risk of crowding out private investments, which would lead to a misallocation of capital. The result would be that the wrong companies are financed. These disadvantages of public funding could be mitigated by **co-funding models**, where private players are involved in both selecting the project and sustaining the losses (GCEE Annual Report 2015 items 689).

140. The problem in Germany is, however, that the already abundant public funds cannot compensate for the **lack of private funding**. In Germany, 38 % of venture capital already comes from public institutions, in the United States it is 0 %. Nevertheless, the total volume is about six times as large in the United States (AFME, 2017). It is therefore important to improve the conditions and incentives for private venture capital. As proposed by the GCEE, this includes tax

equalization of debt and equity, for example via the interest adjustment of share capital (GCEE Annual Report 2017 items 385 ff.). ↘ ITEMS 640 FF.

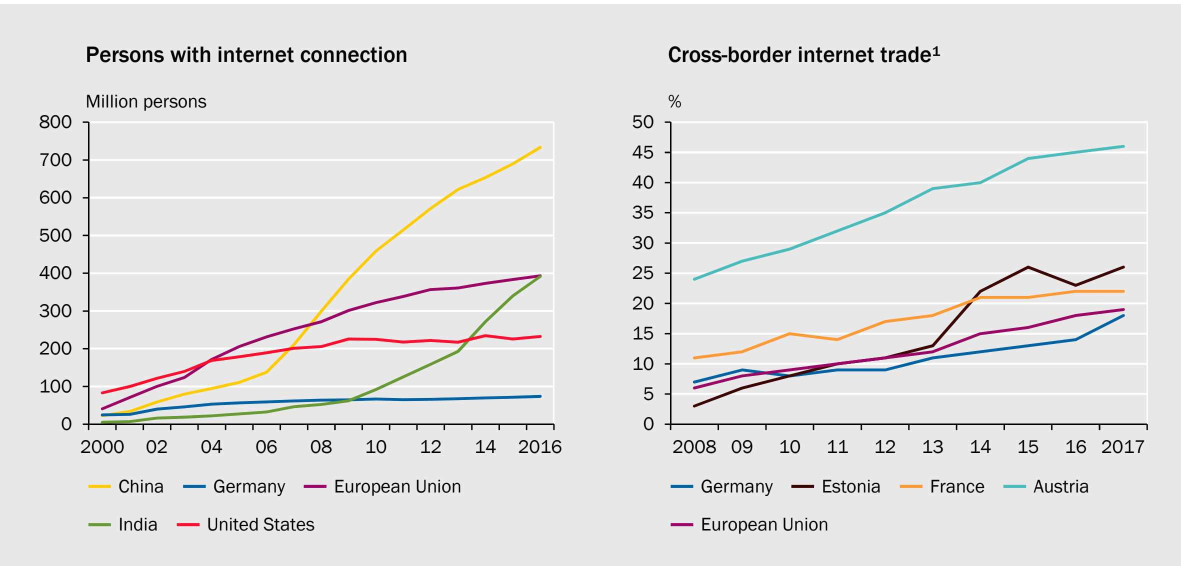
Expanding the **Capital Markets Union** could make more capital available to finance businesses via the capital market and other EU member states. ↘ ITEMS 539 FF. A further issue of the Capital Market Union is to strengthen the stock market for growing companies. Pension funds in the United States make a major contribution to private venture capital. Strengthening the second and third pillars in the German pension system would, therefore, improve the situation (GCEE Annual Report 2017 items 615 ff.).

141. In order for companies and the workforce to take advantage of the opportunities offered by technological change, it is important not to put regulations to high. Regulation must strike a careful balance between increased protection and the resulting obstacles to innovation. The guiding principles should be **openness to innovation and willingness to adapt regulations** (GCEE Annual Report 2017 item 62).

142. In some countries, and in Germany in particular, the reaction is to **stave off** innovation with accordingly **restrictive** regulation. According to a survey by the Ipsos-Institute, only about half of Germans have a positive attitude towards digitalisation, whereas in China this number is 83% and in India 90% (Heuzeroth, 2018). The reasons for such an attitude can be found in the lack of **trust** in new technologies, for example due to concerns about insufficient data protection. ↘ ITEM 161

The positive effects of technological change often take a back seat in the public debate. Dramatic negative forecasts occupy much attention. Businesses, scientists and politicians could point to **opportunities and benefits of technological change** and communicate realistic scenarios. Trust in digital technolo-

↘ CHART 17
Internet connection and cross-border orders via the internet



1 – Persons who ordered products from providers in other EU member states on internet during the past 12 months as % of total

Sources: Eurostat, World Bank, own calculations gies and their general acceptance in society can only be built if risks are reasonably noted.

143. Economies of scale play a major role for digital services. This is why market size is particularly important. ↘ CHART 17 LEFT At European level, an implemented **digital single market**, with uniform regulations and low barriers to entry, would offer new and established companies a **larger outlet** ↘ CHART 17 RIGHT The European Parliament's scientific service estimates that completing the digital single market could add 415 billion euros to economic output annually. The reason for this is greater efficiency and lower transaction costs (EPRS, 2015). The main obstacle for this has been the co-existence of 28 different legal systems. For example, according to the European Commission, the administrative costs of value added tax returns for online retailers currently amount to around 8 000 euros per year for each EU member state in which they do business (Europäische Kommission, 2018). A directive is planned to enable registration for value-added tax collection via a single point of contact instead of separately in each country (European Commission, 2016).

DIGITALISATION AND TECHNOLOGICAL PROGRESS: KEY MESSAGES

↘ Emphasizing the opportunities of technological change and, in particular, digitalisation, which in the past has created more new jobs on balance
↘ Empowering the population to adapt through the right conditions, better start-up funding and a modern education system
↘ Strengthening innovation openness and social esteem of entrepreneurship in order to exploit opportunities and advantages of technological change

2. Modern digital infrastructure and administration

144. One important factor of digitalisation, which contributes to productivity development, is **investments in ICT** and accompanied infrastructure investments (GCEE Annual Report 2015 items 648 ff.). Germany places in the lower tail of the distribution when comparing investments in modern ICT-Capital on an international scale, such as within the G7-States (GCEE Annual Report 2017 item 809). One reason might be the lack of **complementary investments** such as on-the-job training, product design or intangible expenditures. Intangible expenditures include an efficient firm organization and innovation-friendly management structure (Elstner et al., 2016).

In particular **small- and medium-sized enterprises** are not sufficiently prepared for pending changes (Elstner et al., 2016). The educational system should be improved along the entire education chain. The adjustment to changing requirements holds in particular for the educational system (GCEE Annual Report 2017 items 812 ff.). This includes the support of basic competencies, the expansion of IT and computer classes and digital infrastructure at school.

145. Although 95 % of households in Germany already have grid-bound broadband Internet access with a minimum of 6 Mbit/s (BMVI, 2017), the average **maximum connection speed is low on an international scale** (Akamai, 2017). The Federal Government therefore plans, according to the coalition agreement (Federal Government, 2018a), to expand to a national wide gigabit network by 2025, dedicating ten to twelve billion euros of public funds for this purpose.

146. Higher connection speeds are expected to be necessary for future applications, such as autonomous driving or telemedicine, which will mean that **Germany has to catch up**. However, it is unclear where and with which technology these speeds can be achieved most efficiently. The technological requirements for applications that can already be projected differ widely. Moreover, businesses and private households will have different usage behaviour, which places different requirements on the technology.

There is no single technology, whether based on copper, coaxial or fibre optic cable or wireless that will be able to cover all applications perfectly due to its technical and economic characteristics (Monopolies Commission, 2017). In quantitative terms, high-speed Internet is expected to have an economically relevant, significant positive effect on GDP. However, this effect is not different to that of mobile Internet (Bertschek et al., 2015). From a cost-benefit perspective, it is therefore questionable whether the nationwide expansion to almost 100 % should be carried out with a certain technology – fiberglass technology (Briglauer und Gugler, 2018; GCEE annual report 2017 Item 805).

147. In addition, the **demand** for high-speed Internet (based on fiberglass) does not even match the relatively slow expansion. Only 17 % of these connections are currently used in Germany, and 19 % in the EU (EU Digital Scoreboard, 2017). Moreover, the demand for broadband Internet is below OECD average (Akamai, 2017). Prices are unlikely to be the main reason for this, as they are relatively low as a percentage of disposable income compared to the rest of Europe (Europäische Kommission, 2017a). A more likely key reason could be the lack of applications for (ultra) high-speed Internet in private households and companies to date.

148. Against the background of previous considerations and the high level of uncertainty associated with future demand for high-speed Internet and technological progress, a **mix of different technologies** would be preferable to nationwide coverage with fibre optic cable. Experiences in East Germany during the 1990s have shown that intensive public subsidies of a specific kind of digital technology, in this case optical access lines (OPAL), appear to be a bad investment. OPAL was the leading high-end technology (Falck et al., 2014). In the early 2000s, however, the Internet became a mass phenomenon and it turned out that this technology was outdated because of low capacities and insufficient compatibility with the new DSL-technology.

149. Investment decisions should be left to those with high proximity to market participants and innovative developments. A **higher level of competitiveness** would also ensure that providers react to increasing demand. Market power, in terms of invoiced connection costs, is still high in Germany compared to the rest

of Europe (Monopolkommission, 2017). Approximately 40 % of the grid-bound connections in 2017 were attributable to the Deutsche Telekom (Bundesnetzagentur, 2018a). Regarding the mobile telephone system roughly one-third each is attributed to Deutsche Telecom, Vodafone and Telefónica (Bundesnetzagentur, 2018b).

150. More competition could be created, for instance, by increased flexibility of access and fee regulation for fibre optic infrastructures or regulatory easing as regards cooperation on the expansion (Monopolies Commission, 2017). Care should also be taken in this context not to increase the **market power of established providers** through regulation, such as charging “distinctly higher wholesale prices” to increase the attractiveness of investment (Federal Ministry for Economic Affairs and Energy (BMWi), 2017).

In some areas with socially positive costs-benefits perspectives (GCEE Annual Report 2015 item 667), as well as areas where private investment is unlikely due to a lack of profitability**, government subsidies** may be necessary. These should, however, be **technology-neutral** in structure, and relate to justified exceptions in **individual cases** that are aligned to local needs (GCEE Annual Report 2017, items 805 f.). In any case, it is necessary for the Bundesnetzagentur to ex post evaluate empirically the costs and benefits of the public expenditures (Girard et al., 2018).

151. Liberalising net neutrality may be a further way to increase incentives for investments (Krämer und Wiewiorra, 2012; Monopolkommission, 2013b; Baake und Sudaric, 2018). Net neutrality is the equal and nondiscriminatory supply of high and equal quality of data transmission (EU-regulation 2015/2120) and content by network operators to all households. Net neutrality is settled in the coalition agreement. However, it is highly questionable whether this leads to limitation of applications, for example in the field of telemedicine or autonomous driving.

The liberalisation of **net neutrality** potentially increases competition among network operators. The reason for this is that the current regulatory framework holds equally for all firms. Thus, the restrictions do not target market power of firms unlike other possible interventions. It should examined whether the trade-off with non-economic arguments are fundamentally grounded and whether the liberalisation makes nondiscriminatory **price and quality differentiation** (Monopolkommission, 2013b) impossible.

152. Based on the coalition agreement, profits from the release of mobile licenses (UMTS and 5G) shall be used for the development of fibre optic infrastructure. This prefers fibre optic over the radio technology. This way of fund allocation to companies that provide fibre wire technology generates an unjustified competitive advantage at auctions of mobile licenses. The development of **mobile networks** is, however, more important for many applications than a 100 % coverage of grid-bound broadband Internet.

153. One area with high applicability for high-speed Internet could be the **digitalisation of public administration**. The degree of digitalisation of public administration in Germany is low compared to international and European countries.

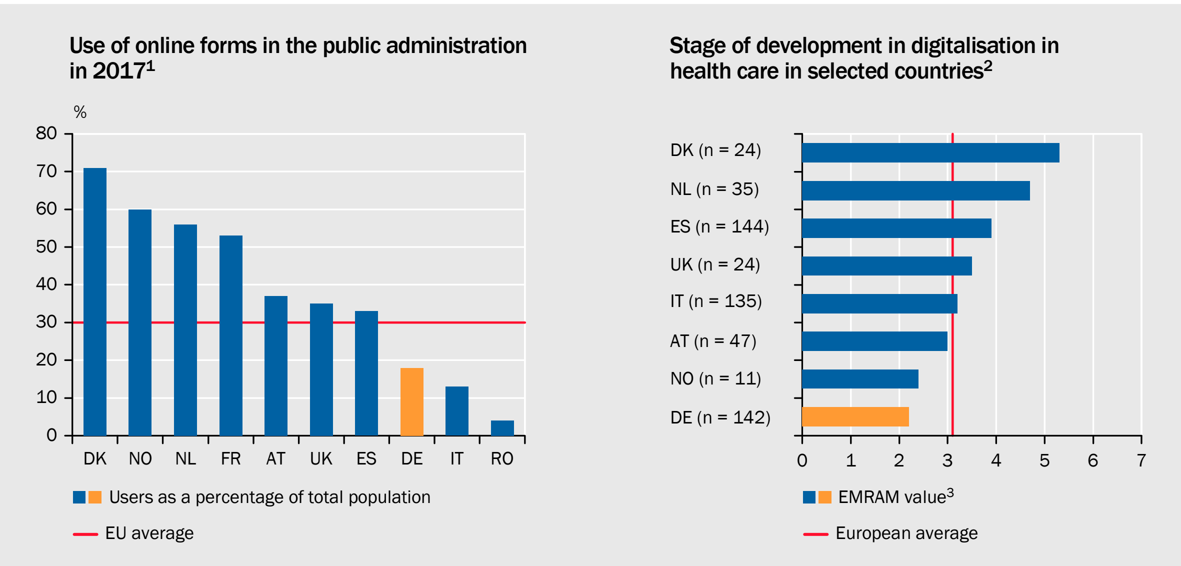
↘ CHART 18 LEFT This is particularly true in terms of user-friendliness and prominence of online applications for public administration (Europäische Kommission, 2017b). Both factors as well as a low degree of confidence to leave private data to public authority (Bitkom, 2018b) are likely reasons for the ongoing refusal of existing public applications.

154. The coalition agreement (2018a) holds out the prospect for a **uniform and central portal for residents and companies**. This is to be welcomed and should be implemented quickly. The National Regulatory Control Council (*Nationaler Normenkontrollrat*) proposes the „once-only“ principle. This principle states that data collection by public authority should only take place once.

The screening of standards is stipulated in the coalition agreement by the Federal Government to examine existing laws for their digital suitability (NKR, 2018). In addition, according to EFI (2016), there is a need for more extensive and digital access to public current data from federal, state and local government level, which are provided in a machine-readable way (open data).

155. The healthcare sector is another area where digitalisation may bring significant efficiency gains. Based on an eight-step assessment of digital progress in hospitals, Germany places far below average in international comparison (HiMMS Analytics, 2017). ↘ CHART 18 RIGHT Thus, there is backlog demand. Based on a survey among companies in the healthcare sector, only 15 % consider digitalisation to be extremely or very important (ZEW, 2018b). The awareness of the importance of this topic does not seem to be widespread yet.

↘ CHART 18
Digitalisation in public administration and health care



1 – Users as percentage of total population, who submitted completed forms to public administration via internet in the last 12 month. DK-Denmark, NO-Norway, NL-Netherlands, FR-France, AT-Austria, UK-United Kingdom, ES-Spain, DE-Germany, IT-Italy, RO-Romania. 2 – Number of participating hospitals in parentheses. 3 – EMRAM: Electronic Medical Record Adoption Model. Lowest stage 0: information systems not installed for larger departments, data from external service providers can not be processed electronically. Highest stage 7: complete electronic patient file integrates all clinical area, replaces all paper files and builds the standard for data exchange. Data as of 2016, for Norway, Austria and United Kingdom as of 2015.

Sources: Eurostat, HiMSS (2017)

156. A central building block of digitalisation in the healthcare sector is the electronic patient file. In terms of data protection, the use and evaluation of individual level data in the healthcare sector requires special care. Under consideration of the data protection law and the principle of solidarity, an increased use in information and communication technologies may prevent diseases and overcome physical distances for medical treatment.

In order to exploit this potential at large and to ensure interoperability between patients, doctors, and institutions, such as hospitals and pharmacies, a mutually, comprehensive and compatible telematics infrastructure is needed. Beside the large barriers of a comprehensive telematics infrastructure, one of the great advantages of overcoming physical distances is currently hampered by regulatory requirements, such as the ban on tele-medicine (*Fernbehandlungsverbot*).

DIGITALISATION – INFRASTRUCTURE AND PUBLIC ADMINISTRATION: KEY MESSAGES

- ↘ Increasing the connection speed in Germany without preference given to any specific technology, under increased competition and only with state-subsidies in individual cases
- ↘ Utilization of efficiency potentials in the digitalisation of public administration and the healthcare sector, for example through a central portal and the electronic patient file
- ↘ Increasing private ICT investments, for example through the promotion of complementary investments and a modern educational system

3. Restraint in industrial policy interventions

157. Whenever structural change becomes visible and technological changes become apparent, the calls for industrial policy interventions become louder. This was the case in Germany in the current year with reference to the production of batteries (Altmaier, 2018) or the merger of banks. ↘ ITEM 536 Often these calls are paired with references to the supposedly successful industrial policy of other states, especially in China.

158. In order to be sustainably successful, however, an innovation location should **refrain from a guiding industrial policy**, which sees it as a state task to identify future markets and technologies as strategically important (GCEE Annual Report 2009, items 323 ff.). It is unlikely that policymakers have sufficient knowledge and understanding of future technological developments or changes in demand to make this a meaningful long-term strategy. If the government is concerned about sustainable progress, it should rather rely on the **decentralized knowledge** and the individual actions of **various actors** of the national economy.

The government should provide an appropriate infrastructure and sustain an effective competition instead of supporting specific technologies or companies. Exceptions can be made when **external effects**, such as in basic research and the preservation of public law and order (for example in the armaments sector), are large. The burden of proof of the existence of market failure is, however, in the hand of the proponents of the intervention.

159. The **potential for failure** is greater the **more fragmented and targeted the policy** is. The prime examples for this are the solar companies in East Germany. Instead of relying on market mechanisms and leaving the implementation to decentralized actors, politicians have tried to establish new industrial companies with a detailed, technology-specific support.

160. Regarding **digitalisation-related regulation**, German policy proceeds in small units and focuses on individual interest groups. Examples include the price maintenance for e-books, the ban on mail-order sale of prescription medicines and certain taxi services or the ancillary copyright for press publishers. A general regulation, which includes new business models, would be a better way. In doing so, consideration should be given not only to the most comprehensive subordination of new competitors to existing regulations, but also to the reduction of regulation for existing companies (Monopoly Commission,2015)

In this context, questions are raised not only in Germany. The focus on five aspects (Frenken et al., 2017) of re-adjustment of regulation, and, if answered, could result in more acceptance of the new business models:

– **Fair competition**: the legal framework must ensure that there are no competitive distortions caused by regulation for new entrants and established companies active on the same market. However, not all differentiation in business represents competitive discrimination against incumbents, and assessment of the competitive situation requires a view that takes more into account than market share (GCEE Annual Report 2017 box 21).

– Tax liability: **tax legislation** should not cause competitive distortions. Existing tax legislation must also be enforced for providers on digital platforms just as it is for traditional providers.

– Consumer protection: the same minimum requirements should be demanded of new providers as regards **protection of consumers**. However, this may also mean easing existing restrictions, such as on market access for (professional) service providers (GCEE Annual Report 2015 item 628). A return to the requirement to hold a master craftsman diploma as is currently being discussed, would be a step in the wrong direction. Quality control is also necessary, although the new forms of implementation, such as an assessment system involving a large number of consumers, can be taken into account.

– **Employee protection**: the new business models often demand more flexible rules, e.g. regarding the type of employment or working hours. Many employees appreciate such rules, as they may otherwise be unable to offer the service. On the other hand, the new forms of employment relationship may present disadvantages as compared to traditional forms. The Working Hours Act (*Arbeitszeitgesetz*) should be amended to include additional flexibilities while preserving minimum standards, if both employer and employee agree. ↘ ITEM 90

– Data protection and security: as digital platforms are often based abroad, it is difficult to check **data protection and secure privacy**. However, it must be ensured that there is no discrimination between domestic and foreign providers.

161. The GDPR of the EU, which has been implemented since May 2018, uniformly regulates data protection. The data protection requirements can lead to high expenses for companies in connection with digital technologies (Arntz et al., 2016). By the end of 2019, the ePrivacy-Regulation is expected to complement the GDPR in the field of electronic communications and could have implications for the digital economy. A planned opt-in procedure would require the user's consent, for example, when creating user profiles or personalized advertising. This could mean that especially smaller providers face lower advertising and refinancing options and that large online platforms are receiving an advantage (Monopoly Commission, 2018)

162. However, data security, data privacy and the guarantee of privacy are important in the digital world. The relatively strict data protection could in some areas even become a **location advantage** for companies and consumers. This is the case for companies that are active, for example in the field of protection of intellectual property or business models for securing and keeping data confidential. According to Kretschmer et al. (2018) the GDPR also has the potential to **develop competition**, since individual data must be portable and, thus, it is easier to switch to offers of other competitors. This can increase competition, especially in the insurance market, electricity providers or social networks. However, due to insufficiently defined standards and limited data compatibility, implementation in practice has yet to become apparent.

163. In addition to the high demands on data protection, a public debate – both in politics and among lawyers – on data ownership has begun (Härting, 2016, Haas, 2017). While objective data, such as age and gender, can be passed on by individuals, algorithms generate data from interactions and human behaviour.

As Wambach and Müller (2018) point out, the discussion on which data should and cannot be used should be intensified. This requires a proper **framework of data** usage and the definition of standards, especially for data application. An appropriate regulatory framework provides greater security and is necessary to promote innovation and not hinder efficiency gains from digitalisation (GCEE Annual Report 2017 item 66).

164. Digital platforms and large digitals companies have become, in some markets, monopolized worldwide (GCEE Annual Report 2017 Box 21). Based on market capitalization, the worldwide largest digital companies are Apple, Amazon, Alphabet (mother company of Google), Microsoft and Facebook. In the meanwhile, there is pressure for greater taxation of digital companies. However, this is problematic with respect to tax and commercial policy. ↘ ITEMS 615 FF.

As stipulated by the Federal Government, adapting the **competition and antitrust law** to the digital world, as proposed by Schweitzer et al. (2018), is the way forward. Based on that, antitrust authorities should already be able to sanction anticompetitive behaviour before the company has achieved a dominant position in the market. Additionally, it should be possible to prevent a strategic take-over of young start-ups that could be a competitor in the future, beforehand. The law adaption also includes the facilitation of access to data of large firms.

DIGITALIZATION – INDUSTRIAL POLICY AND REGULATION: KEY MESSAGES

- Renouncing government-intervened industrial policy in favor of individual companies and technologies, instead ensuring appropriate infrastructure and effective competition
- Avoiding discriminatory regulation of traditional and new businesses and business models
- Modernization of competition law, but no special taxes for digital companies

A differing opinion

165. One member of the Council, Peter Bofinger, does not share the criticism of the Federal Government by the majority in this chapter. This applies, on the one hand, to the general assessment that the government is moving in the wrong direction with its policies and, on the other hand, to the specific statement that it is the wrong way to "budge to the demand for industrial policy interventions".

166. In principle, the majority repeats its fundamentally negative assessment of the German economic policy, as can already be found in the 2013 annual report (and also the following reports). At that time, a "backward-looking economic policy" was diagnosed for the new government: "Taken as a whole, the economic policy measures currently under discussion threaten to undo the progress of reform that Germany has been able to achieve in recent years." The majority at the time linked this assessment with the warning that the future challenges are even more difficult to tackle if the Agenda 2010 reforms are watered down or partially reversed. The would apply to "measures hostile to growth and employment such as the minimum wage."

In the meantime, five years have passed, which turned out to be **unusually good** in economic terms. From 2013 to 2018, the German economy grew by around 2% per year and the yearly average number of employees in 2018 is more than 2.5 million higher than in 2013.

167. The majority criticizes the tightening of the veto power rules under the Foreign Trade and Payments Regulation (*Außenwirtschaftsverordnung*), which should grant the Federal Government **more control over investments and takeovers by investors from outside the EU**. It astonishes that economists, who are extremely skeptical of the state's active role in the economic process, have no reservations when technologically leading German companies are bought by

Chinese investors. Even though these are formally privately owned companies, it is quite possible that they have the Chinese state in the background, given the unclear dividing line between the state and the economy, especially in the financial sector (GCEE annual report 2016 items 998 ff.).

168. The proposal for an **expenditure rule for the euro area**, ↘ BOX 1, is not shared because it can lead to considerable restrictions of the fiscal room for maneuver of the Member States of the Euro Area (Bofinger, 2018).

Arguments for public industrial policy

169. The majority opposes a "**guiding industrial policy**" which "sees it as a state task to identify future markets and technologies as strategically important." According to the majority it is unlikely that policymakers have sufficient knowledge and understanding of future technological developments or changes in demand to make this a sensible long-term strategy. The state should rather rely on the **decentralized knowledge** and individual actions of **various actors** in the economy.

The potential for failure apparently would be greater, the more fragmented and targeted the policy is. A prime example of this would be the fate of **solar companies in East Germany**.

170. The literature on industrial policy speaks against this point of view. Under certain conditions this literature considers it appropriate that the state intervenes in economic activity. John Maynard Keynes (1926) pointed out that the state is not concerned with doing things that private individuals are already doing, and then doing them a little better or worse. Rather, it's about doing the things that are not being done at all at that time. In particular, there are three factors that can justify a public industrial and innovation policy (Mazzucato, 2015):

– **Uncertainty** in the sense that no probability distribution for the possible outcomes is known,

– **Network effects and externalities** that require coordinated action by private and public actors,

– **Path dependencies**, resulting from high fixed costs and long lifetime of investments, especially in the energy sector.

171. The problem of **uncertainty**, or at least very high risks, can lead to private players refraining from innovative investments, even though they do not assess them as being fundamentally negative. This is often called "**capital market failure**" (Chang et al., 2013). A recent example of this is the decision of Robert Bosch GmbH to discontinue the development of its own production of battery cells for electromobility. This was explicitly justified by high fixed costs and high risks: it was said that it remains open in view of the dynamic and difficult to predict external market factors, if and when this investment would pay off for Bosch. Such a risky investment would not be acceptable in the overall interest of the company (Bosch, 2018). This reflects the fundamental problem that many companies are increasingly seeking to achieve **amortization of investments**

in a relatively short amount of time (Koller et al., 2017). Therefore, from this perspective, it is not enough to rely on the "decentralized knowledge and the individual actions" of the market players.

172. The **problem of coordination** stems from the fact that innovation is no longer about isolated technologies and industries. Rather, most modern technologies are systems and entire value chains with interdependencies between multiple industries that develop advanced materials and components as well as manufacturing systems and service systems (Tassey, 2010, Keller and Block, 2012). An example of this is the development of the smartphone, whose key components (Internet, GPS, touch-screen display, SIRI) have been developed as a result of government research funding in the United States (Mazzucato, 2015).

Innovation processes are therefore highly interdependent, with pronounced positive externalities which cannot be adequately taken into account in the innovation decisions of individual companies. Therefore, innovations are supported by "**industrial commons**", of which Pisano and Shih (2009) understand spatially concentrated collective research, engineering and industrial production capabilities that drive innovation.

173. The **problem of path dependency** is described by Aghion et al. (2011) as companies sticking to existing technologies because of externalities of fundamental innovations. This favors in particular a sticking to "dirty technologies". The authors corroborate this with a study that shows a positive correlation between innovations in "clean" technologies and the existing patents of a company in this area and a negative correlation for the stock of patents in "dirty" technologies. The comparatively little success of German automobile companies in the development of electric cars can serve as anecdotal evidence in this respect.

Path dependency is especially problematic in **competition with an emerging market economy** that largely skips a certain stage of development and then has a better competitive position with more advanced technology. This can be seen in **electromobility**, in which China - in contrast to the market of the internal combustion engine - plays a leading technological role.

174. Overall, **China**, as well as other Asian states, are an impressive example of how **industrial policy** can successfully identify industries that can successfully compete in international competition over years.

An example of this is especially the development and production of **solar cells**, where China has succeeded in becoming the world's largest manufacturer in a short period of time. The rapid development in this capital-intensive area cannot be explained by the conventional perspective of comparative advantages. Gang (2015) sees this rather as a success of state capitalism which is a common East Asian development model in which states play a significant and sometimes crucial role in industrialization and the creation of markets.

Subsidies for the development and production of solar cells include interest-free or subsidized loans, tax breaks, research grants, cheap land plots, energy subsidies and technological, infrastructural and human resources support

(Gang, 2015). The dark side of the excessive subsidies was considerable overcapacity, which led to a sharp fall in world market prices. The three largest suppliers of solar panels in the world today come from China, which produced around two-thirds of the world production in the years 2010 to 2015 (Sanderson, 2018).

It does not speak against German industrial policy, if **East German companies** have not been able to compete on the world market with these massive government subsidies. On the contrary, it proves that it is difficult for individual companies to prevail over the massive promotion of their competitors by the Chinese authorities.

175. This justifies not least the relatively late efforts of the European Commission and the Federal Government to promote its own production of **battery cells** through a **European Battery Alliance**. For example, apart from massive loans, China has also provided the supplier CATL with competitive advantages in that electric cars only receive government subsidies if they contain domestic battery cells.

The concept of the European Battery Alliance, founded in October 2017, follows the systemic, innovation policy approach outlined above (European Commission, 2018m). It has already succeeded in mobilizing and coordinating an "**ecosystem**" of around 260 industry and innovation players from all segments of the battery value chain.

176. The need for a strengthened European industrial policy is also reflected in the fact that important German industrial companies are **relocating their application-oriented research activities to China**. For example, Schaeffler will build the "Factory of the Future" in Xiangtan, Bosch will build an industry 4.0 reference factory in Xian, and Siemens plans to build its global research center for autonomous robotics in Beijing. This confirms the theory of Tassey (2010), according to which companies relocate their research and development activities to countries with better R&D infrastructures and more favorable financial support.

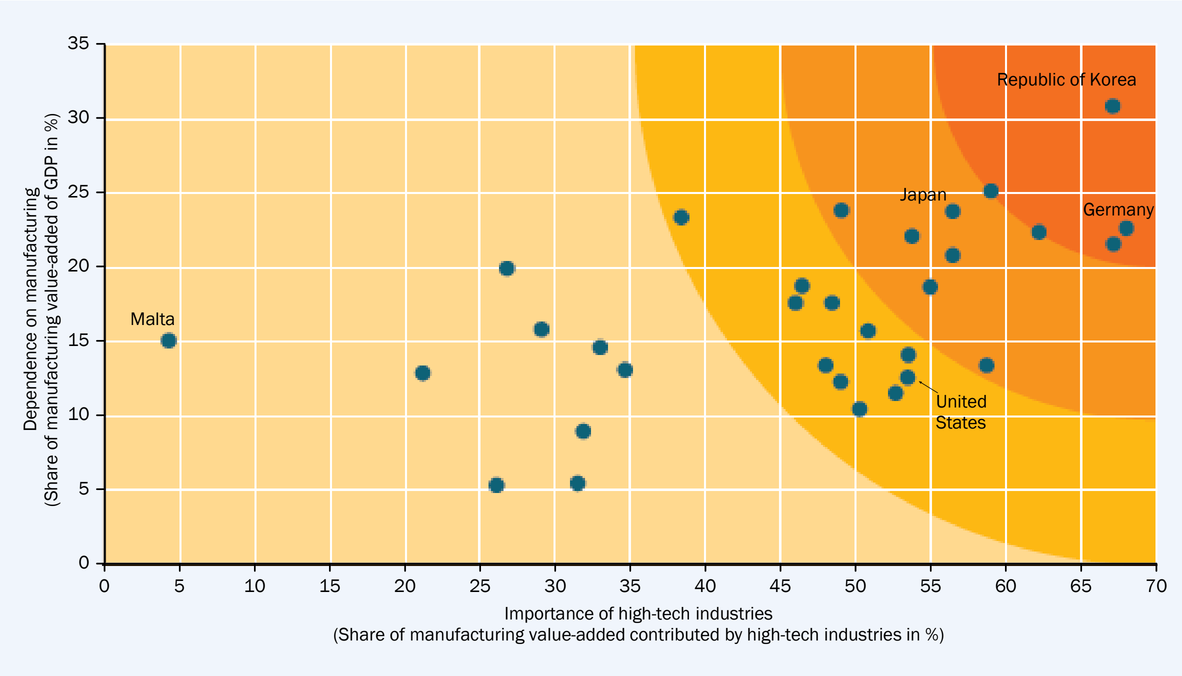
The Scientific Society for Production Technology (*Wissenschaftliche Gesellschaft für Produktionstechnik*; WGP, 2018) sees the "transfer of key technologies for adaptive and therefore flexible automation based on autonomous (sub-) systems from basic research to the application of industrial production" as an important prerequisite for the competitiveness of the German economy. It is therefore worrying if the therefore required "Living Labs", i.e. "entire factories, which are constructed as a kind of real laboratory to understand how Industry 4.0 works in practice" (WGP, 2018), will not be created in Germany but in China.

177. It is therefore not expedient for economists (Feld et al., 2017) to discuss the significance of industrial policy in Germany and Europe completely detached from such massive aspirations of China. With the "**Made in China 2025**" strategy, this country is aiming for a dominant position in world markets for high-tech products, with the explicit goals of "self-sufficiency" and "indigenous innovation" (Wübbeke et al., 2016). Given the high proportion of industry and the high

importance of high-tech industry at the same time, Germany is one of the countries that is particularly affected by this strategy. ↘ CHART 18 Since those countries that create innovation-friendly ecosystems, are expected to prevail in global competition for modern technologies (Tassey 2010), the current **industrial policy efforts of the Federal Government** are going in the right direction.

↘ CHART 19

Effect of China's industrial policy („Made in China 2025") on industrialised countries



Source: Mercator Institute for China Studies (MERICS)

APPENDIX

Proposals to reform the World Trade Organisation

178. The World Trade Organisation (WTO) was founded in 1995 to provide rules for a multilateral trading system. Its membership has since grown to 164 states. Negotiations to revise the organisation's trade rules, such as those in the Doha Development Round that commenced in 2001, have not been successful to date. The intention of **reforming the WTO** in a joint effort has been recently confirmed at **bilateral** EU **summit meetings** held with China, Japan and the United States (European Commission, 2018n; 2018o; 2018p).

179. The debate on reforming the WTO focuses on five aspects in particular. Firstly, eliminating the democratic deficit would enable strengthening **WTO legitimacy, accountability and transparency**. Eckhardt (2013) and Elsig (2016) call for creating a standing advisory council for business, trade unions and non-governmental organisations to step up the exchange of information between regulators and stakeholders. Basedow (2017) also considers greater involvement of national parliaments. Moreover, the capacities of the WTO Secretariat to collect trade data and perform scientific analysis particularly in terms of scope and effect of trade-inhibiting practices could be enhanced (Elsig, 2016; Hoekmann et al., 2018).

180. Secondly, reforms could render the **WTO's organisational structure more effective and efficient.** An executive committee could decide the WTO's general strategy and coordinate multilateral negotiations in the sub-committees (Abbott, 2013; Elsig, 2016). To date, numerous committees organised by thematic areas of responsibility and comprised of member state representatives share the WTO executive function. The creation of new committees, for instance for e-commerce and global value chains, as well as the elimination of redundant committees could contribute to modernisation (Elsig, 2016; Samans et al., 2016; Stephenson, 2016). Moreover, involvement of national regulators in committee work has been proposed (Basedow, 2017).

181. The United States has blocked the appointment of WTO Appellate Body members since June 2017 as it considers that this body's interpretations of WTO rules partially overstep its mandate and contradict trade liberalisation (Fabry und Tate, 2018). Ambiguities in WTO rules that the Appellate Body determines could be referred to a WTO committee to clarify the rules by means of a multilateral negotiation process (Fabry und Tate, 2018). The European Commission (2018p) has proposed increasing the number of judges from seven to nine in order to shorten the duration of appeal cases, and giving the judges full-time appointments rather than the current part-time, as well as no longer permitting re-appointment of judges but rather appointing them for a longer term of office to strengthen Appellate Body independence.

182. Thirdly, a **change in the negotiation and decision-making processes** within the WTO could increase its effectiveness. Negotiations within the Doha

Round are undertaken in accordance with the 'single undertaking principle'. Every element of a negotiation is regarded as part of a single indivisible undertaking and may not be negotiated separately. Abandoning this principle could enable progress to be made – at least in policy areas in which there is agreement (Elsig, 2016). The consensus principle applies to decisions taken in the WTO bodies (Ministerial Conference, councils and committees): new rules may only be decided by approval of all member states. A voting system based on a qualified majority or weighted voting could accelerate the decision-making process (Abbott, 2013; Elsig, 2016; Lamy, 2009).

183. Fourthly, the United States, the European Union and Japan demand a **revision of WTO rules**, in particular a tightening of rules to contain market-distorting subsidies and state enterprises as well as protection of intellectual property (European Commission, 2018p; 2018q). To this end, corresponding incentives must be granted and sanctions imposed to enforce members' notification obligation on subsidies granted, as well as new rules adopted on market access for foreign investors (joint venture obligations, for instance) and a clear definition of state enterprises. In addition, the European Commission (2018d) demands that rules be established on digital trade.

184. Agreements concluded within the WTO already contain provisions giving special rights to **developing countries** that permit them, for example, longer deadlines for implementation of agreements or that allow developed countries to grant them tariff concessions (WTO, 2018a; 2018b). The EU criticises the strict classification of WTO members as developed and developing countries as the latter meanwhile comprises some of the world's largest trading nations (European Commission, 2018p). The EU demands instead a different approach with special rules taking the differences between member states into account. These rules should be targeted to their needs and development goals and be limited in time. It could generally be useful if potential impact assessments of measures were conducted and stakeholders consulted well in advance. Once the measures have gone into effect they should be monitored and their impacts evaluated (Basedow, 2017; Hoekmann et al., 2018; European Commission, 2018p).

185. Fifthly, **plurilateral negotiations and agreements** could be incorporated into the multilateral network to ensure sustained international WTO relevance (European Commission, 2018p). Since the beginning of the 1990s, the number of regional and plurilateral trade agreements has surged (WTO, 2018e). While multilateral agreements affect all WTO members, plurilateral trade agreements only involve some members. This includes the CETA and JEFTA bilateral free trade agreements and the TPP plurilateral agreement. Although such agreements are in line with the WTO's rules they can undermine multilateralism as its guiding principle, on the one hand, and offer a way out of the negotiation deadend resulting from the consensus and single undertaking principles, on the other (Basedow, 2017).

186. At any rate, the complexity of international trade law is increasing as is the risk of inconsistent rules. Therefore, disputes within such agreements should fall within the scope of responsibility of the WTO's Dispute Settlement Body. As a

minimum standard, courts of arbitration should recognise and take this body's judgments into account (Basedow, 2017; Stoler, 2013). A committee that monitors and coordinates plurilateral agreements and revises the criteria governing acceptability of such agreements could strengthen WTO multilaterality (Elsig, 2016; Basedow, 2017). This could be a means of establishing the obligation for regional agreements to enable admission of further WTO members in order to become global in scope in the medium term.

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