



Federal Ministry
of Finance

German Stability Programme

2016 Update

German Stability Programme

2016 Update



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Preface to the German Stability Programme for 2016

The member states of the European Union submit their medium-term fiscal plans to the European Commission and to the Economic and Financial Affairs Council (ECOFIN) by the end of April each year. To this end, in order to comply with the rules of the Stability and Growth Pact, member states of the euro area submit updated Stability Programmes, while all other EU member states submit updated Convergence Programmes.

This update of the German Stability Programme was approved by the federal cabinet on 13 April 2016. The programme follows the *Guidelines on the format and content of Stability and Convergence Programmes* (Code of Conduct). The federal government submits each update of the German Stability Programme to the competent expert committees of the German Bundestag as well as to the Finance Minister Conference (*Finanzministerkonferenz*) and the Stability Council (*Stabilitätsrat*). After review by the ECOFIN Council, the Council's opinion on the Stability Programme is likewise forwarded to these bodies.

By submitting this updated Stability Programme, which contains projections of budgetary trends at all government levels (Federation, *Länder*, local authorities and

social security funds), the federal government is complying in full with its obligation for the year 2016 to submit national medium-term fiscal plans in accordance with Article 4 of Regulation (EU) No 473/2013 on the provisions for monitoring and assessing draft budgetary plans.

The Federal Ministry of Finance publishes the updated Stability Programme along with the programmes for preceding years online at:

<http://www.bundesfinanzministerium.de>

The programmes of all EU member states as well as the corresponding European Commission analyses and ECOFIN recommendations are published on the European Commission's website at:

http://ec.europa.eu/economy_finance/economic_governance/sgp/convergence/index_en.htm

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PREFACE



1. Summary

By ensuring continuity and reliability, German fiscal policy is contributing to positive economic trends and stability in Europe. The German economy is posting solid growth, and the domestic economy in particular is demonstrating robustness: wages and employment are increasing appreciably, with total employment expected to reach 43.4 million on average in 2016 – a new record. Fiscal policies targeted towards growth-friendly consolidation have durably boosted consumer and business confidence in the economy's long-term viability, and this markedly improves the climate for stable macroeconomic conditions, higher levels of investment, and stronger growth.

Since 2012, the general government budget – which encompasses the budgets of the Federation, *Länder*, local authorities and social security funds – has fulfilled the criteria of being close to balance. In 2015, Germany succeeded in generating a general government surplus of 0.7% of GDP. By adopting a federal budget that contained no new borrowing, the federal government played a decisive role in securing this achievement. After peaking in 2010, general government debt has fallen: the debt-to-GDP ratio stood at 71.2% at the end of 2015 and is expected to decline further to 68¼% in 2016. According to current projections, the general government debt-to-GDP ra-

tio is expected to decline consistently and to fall below the Maastricht limit of 60% by 2020. Germany met all of the other fiscal policy targets laid down in last year's Stability Programme and complied in full with the rules of the Stability and Growth Pact.

Nevertheless, German fiscal policy continues to face wide-ranging challenges. It remains the case that fiscal policy continues to benefit from exceptional circumstances on financial and capital markets and must therefore prepare for the necessary normalisation of interest rates. In addition, an ageing population is generating greater fiscal burdens. As described in the most recent report by the Federal Ministry of Finance on the sustainability of public finances (published in February 2016), the sustainability of public finances has improved in comparison with earlier reports, thanks to the success of the government's consolidation policies. However, further decisive reforms are necessary to ensure the long-term stability of public budgets. Furthermore, the Federation, *Länder* and local authorities are currently tackling the tremendous and urgent task of providing humanitarian assistance to hundreds of thousands of refugees and integrating them into society. All of these factors give rise to considerable uncertainties for public budgets. Vigilant and forward-looking fiscal policies and a high de-

gree of spending discipline are necessary in order to fully safeguard the government's ability to take effective action in the future and in the case of unexpected events. This includes necessary measures to safeguard Germany's internal and external security. Against this background, the federal government has set itself the goals of (a) ensuring that this year's federal budget also contains no new borrowing, (b) adhering to fiscal policies that foster growth and jobs, and (c) complying with all European and constitutional rules. In the financial plan up to the year 2020, which was adopted on 23 March 2016, the federal government reaffirmed its goal of achieving balanced federal budgets in the years from 2017 to 2020. Germany's Stability Programme for 2016 reflects these fiscal policy targets.

Another key part of Germany's fiscal strategy is to maintain its policies of growth-friendly consolidation. The federal government has succeeded in consistently pursuing this approach. In particular, it has substantially increased its funding to improve transport infrastructure and to promote the expansion of broadband networks. Public investment has continued to increase and rose at a nominal rate of 4.2% in 2015. This increase was led in particular by higher levels of federal government investment. Federal budget resources targeted towards investment have increased significantly in the years from 2014 to 2016, by a total of €6.6 billion. The federal government has given the green light to another solid increase in the coming year, with investment set to rise from €31.5 billion in 2016 to €33.7 billion in 2017. In 2016, German fiscal policy will have a clearly expansionary impact on the economy. These expansionary policies include, in particular, higher spending on measures to provide humanitarian assistance to and promote the integration of refugees, as well as tax relief for families, single parents and low income earners. In addi-

tion, the federal government is providing sizeable financial assistance to the *Länder* and local authorities to help them increase their investment in education, research and infrastructure. Spending by social security funds is also climbing substantially.

Specific federal government measures to promote growth and employment are described in detail in Germany's 2016 National Reform Programme (NRP), which was adopted by the federal government on 13 April 2016 and will be submitted to the European Commission by the end of April. In the NRP, the federal government describes what it is doing to address the economic challenges cited in the European Commission's country report for Germany. In this connection, the NRP outlines the progress that Germany has made in (a) implementing the country-specific recommendations made by the European Council in 2015, (b) meeting the targets of the Europe 2020 growth strategy, and (c) implementing the voluntary commitments set out in Germany's 2015 Action Programme for the Euro Plus Pact. Those measures in the NRP that have a fiscal impact also form part of the Stability Programme's fiscal strategy and public budget projection.

2. Aggregate economic conditions in Germany

2.1 Aggregate economic conditions in Germany in 2015

The German economy continued to post solid growth in 2015. In year-on-year terms, GDP grew at a real rate of 1.7% in 2015. This reflects the German economy's fundamental healthiness, which has helped drive robust domestic growth. In terms of national output, the main sectors driving higher domestic value added included manufacturing, wholesale and retail trade, transport, hospitality, business services, public services, education and health care. This was reflected, for example, in marked levels of employment growth in these sectors of the economy. Growth in Germany is now noticeably more employment-intensive than in the past; this development is led by businesses in the services sector. In terms of national expenditure, household purchasing power and private consumption are being boosted by rising employment and income levels as well as declining energy prices, all of which have given the economy added dynamism. In contrast, foreign trade made only a minor contribution to growth in statistical terms. In terms of national income, there have been marked increases in employment income, business income, and

property income. This has had a positive impact on growth, investment and jobs.

The economy's capacities were near full utilisation levels in 2015, i.e. the German economy's total output of goods and services was roughly in line with estimated potential output. In this connection, declining energy and commodity prices boosted aggregate economic activity by reducing business costs and strengthening household purchasing power.

2.2 Short- and medium-term outlook for the aggregate economy, 2016–2020

Current conditions remain conducive to a continued upward trend of the overall economy in 2016. Wage increases, rising business profits, favourable financing conditions and a positive outlook for domestic sales are likely to lift economic growth this year. In addition, the outlook for the global economy is expected to brighten gradually as well. According to the annual projection contained in the federal government's 2016 Annual Economic Report, the current level of economic momentum is expected to remain unchanged this year. GDP is forecast to expand at a real rate of 1.7% in 2016 – maintaining the same pace as last year.

On the whole, recent economic data suggest that economic growth will regain momentum after slowing temporarily in the second half of 2015. Consumption – both private consumption and government consumption – is expected to be the main driver of aggregate economic growth. The domestic economy is likely to be boosted again in 2016 by low oil and energy prices. Lower commodity and energy prices will also play a key role in contributing to the current account surplus.

Business investment is likely to remain cautious this year, because the impetus to invest in business expansion is not strong enough yet. This will change, however, as soon as foreign demand starts to increase again in the case of an anticipated recovery of the global economy. The very good financing conditions for companies will then have a more tangible positive impact on investment activity. Nevertheless, there is still a high level of uncertainty due to geopolitical risks. These risks are negative factors for export activity as well as for the domestic investment activity of multinational enterprises.

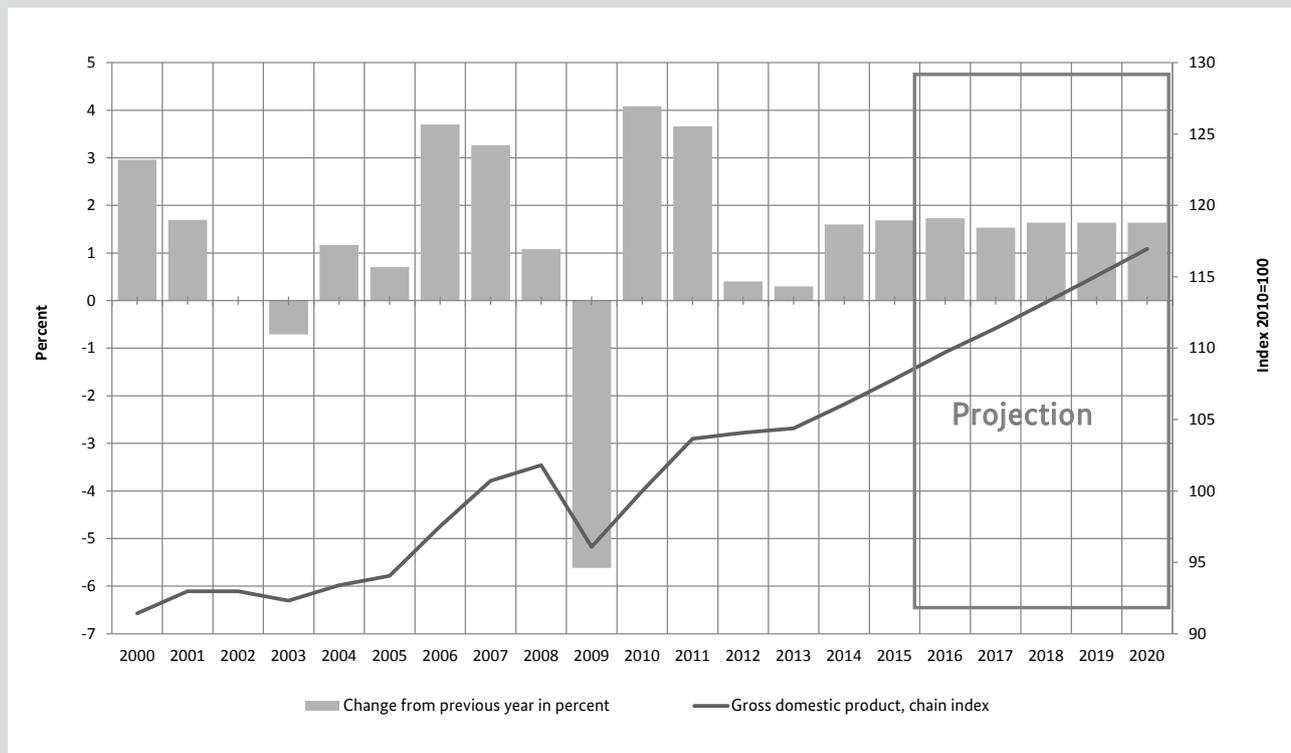
Germany's labour market remains in very good shape. Employment will continue to be boosted by the employment-intensive nature of economic growth in Germany, with total employment forecast to reach 43.4 million on average in 2016 – another record level. Service sector companies in particular are expected to add new jobs. Due to an anticipated slight increase in energy prices, it is expected that consumer and producer prices will climb at a somewhat faster pace in 2016 than they did last year.

It is highly uncertain how the influx of refugees and asylum-seekers will impact the economy, especially since it is impossible at this time to predict the total number of persons who will ultimately seek help. Positive impacts on the labour market are likely to be extremely limited over the short term, since many refugees must first overcome

language barriers and acquire the necessary skills to succeed on the German labour market. However, the recent wave of immigration will lift aggregate demand in the short term; this is expected to lead to higher levels of both private and government consumption.

The influx of refugees is unlikely to increase potential output until the longer term. The extent of this increase will ultimately depend on how well they succeed in being integrated into the labour market. In its medium-term projection up to the year 2020, the federal government expects GDP to grow at inflation-adjusted rates of about 1½% per year (see Figure 1). During this period, the output gap is assumed to remain near zero. Potential growth is expected to be driven in equal parts by technological progress (total factor productivity) and by the inputs of labour and capital.

Figure 1: Gross domestic product, in real terms



3. German fiscal policy in the European context

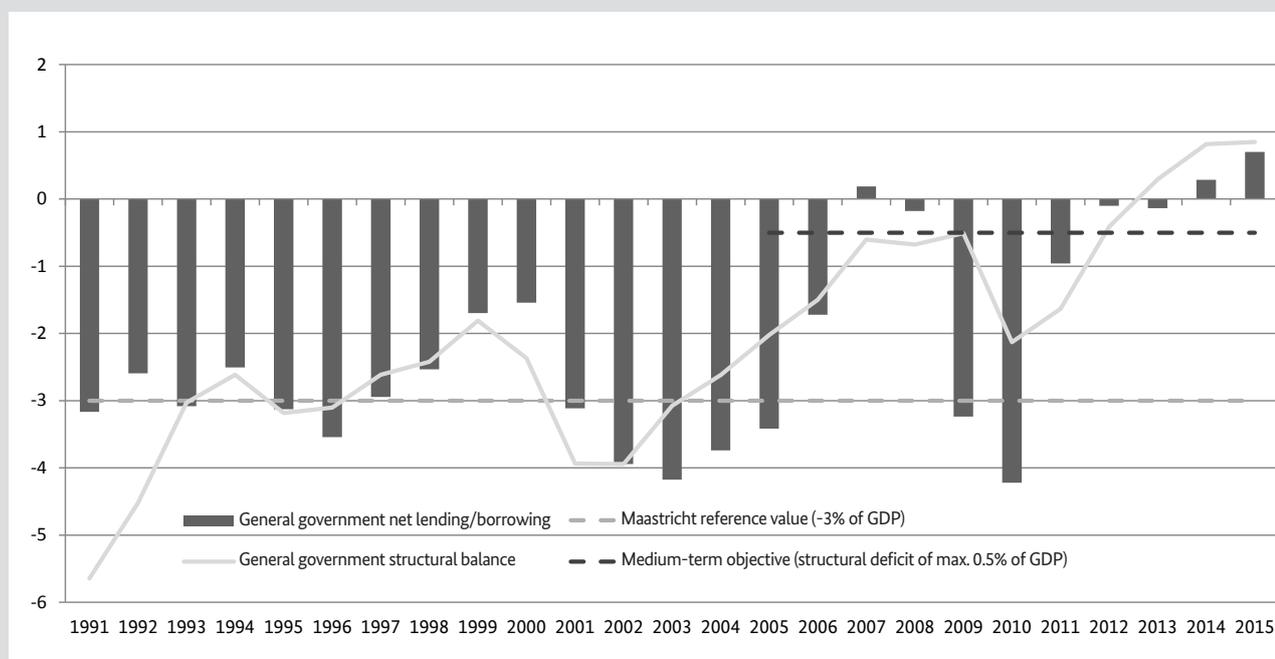
3.1 The rules of the Stability and Growth Pact and the Fiscal Compact and their implementation in Germany

entities) fulfilled the criteria of being close to balance. In 2015, the actual fiscal balance stood at +0.7% of GDP. Figure 2 shows that the general government budget recorded a structural surplus (of 0.8%) again in 2015.

The Stability and Growth Pact requires member states to bring their budgets close to balance over the medium term and to set their own binding targets to this end. The Pact also sets upper limits on budget deficits and debt ratios. Compliance with these targets and limits serves to safeguard the fiscal capacity of each member state in the Economic and Monetary Union. In this way, the Pact requires that all EU Member States pursue stability-oriented fiscal policies as a precondition for ensuring strong, sustainable growth in Europe.

Last year, Germany again complied in full with the rules of the Stability and Growth Pact. On the basis of prudent budget policies, Germany succeeded in keeping its nominal deficit well below the upper limit of 3% of GDP. In 2015, for the fourth year in a row, Germany's general government budget (encompassing the Federation, *Länder*, local authorities and social security funds, including their off-budget

Figure 2: Comparison of structural and actual fiscal balance (in % of GDP)



1995: Excluding asset transfers associated with the assumption of the liabilities of the *Treuhandanstalt*, an agency charged with liquidating assets formerly owned by the East German government, and of the residential construction enterprises of the former East Germany. Inclusive of these effects, the total government deficit amounted to 9.5% of GDP.
 2000: Excluding UMTS revenue. Inclusive of these effects, the government budget showed a surplus equal to 0.9% of GDP.

These surpluses in the general government budget have played a key role in reducing the debt-to-GDP ratio. In 2015, the debt-to-GDP ratio declined appreciably by 3.5 percentage points. General government debt is thus on a sustained downward path, even though it is still well above 64.9% of GDP, the level posted in 2008 when the global financial crisis started. As part of the reforms adopted in 2011 to strengthen the Stability Pact, the EU introduced the “1/20 rule” as a way to spur the reduction of excessive debt levels. This rule, which is binding on all member states, requires that the gap between a member state’s debt level and the 60% Maastricht upper limit be reduced by at least 1/20 per year, averaged over the most recent three years. Germany has fulfilled this requirement for the three-year period from 2013 to 2015. In addition, as part of its 2015 Action Programme for the

Euro Plus Pact, Germany pledged to bring its general government debt-to-GDP ratio below 70% by 2016. According to the government’s projection, Germany will fulfil this commitment.

Germany is currently subject to the preventive arm of the Stability and Growth Pact. Member states subject to measures of the Pact’s preventive arm must, over the medium term, achieve budgets that are close to balance or in surplus. To this end, they set a medium-term objective (MTO) for their general government structural budget balance. The structural balance is determined by adjusting the nominal balance for cyclical and one-off effects. The country-specific MTOs are binding minimum requirements. Under the Treaty on Stability, Coordination and Governance in Economic and Monetary Union (the fiscal compact), member states whose debt ratios exceed

60% and whose public finances are at risk of being unsustainable over the long term must not post structural deficits exceeding 0.5% of GDP. Accordingly, Germany's Stability Programme adopts this upper limit.

The requirements of the Stability and Growth Pact's preventive arm also include an expenditure benchmark, which limits permissible increases in government spending for member states that are on the adjustment path towards their MTO or are just reaching it. The expenditure benchmark is not binding if a member state outperforms its MTO and is not at risk of failing to comply with the MTO throughout the duration of the programme. This is the case for Germany.

In its opinion (dated 15 June 2015) on Germany's most recent Stability Programme, the Economic and Financial Affairs Council (ECOFIN) noted that the macroeconomic scenario underpinning Germany's budget projections had not been endorsed by an independent body. In this connection, the European Commission pointed out the need for adjustments to be made in formally transposing Regulation (EU) No 473/2013 in order to meet the requirements of the two-pack and the fiscal compact; however, it found absolutely no fault in the federal government's projections. The federal government is currently reviewing options for making a suitable adjustment. This is taking place in consultation with European Commission authorities.

3.2 Fiscal situation and strategic direction

In its January 2016 conclusions, the ECOFIN Council welcomed the progress that many member states have made in consolidating their public finances. At the same time, however, it noted that debt levels remain high in most member states and that action is still needed to ensure the long-term sustainability of public finances. The ECOFIN Council also emphasised that member states are obligated to comply with the rules of the Stability and Growth Pact, to establish the necessary fiscal buffers, and to avoid pro-cyclical fiscal policies. Furthermore, member states should target their fiscal and economic policies towards three key priorities, which the European Council reaffirmed in its conclusions of 17–18 March 2015: conducting responsible fiscal policies, pursuing structural reforms to modernise their economies, and boosting investment.

The federal government has taken these guidelines into account in setting its fiscal policy. Germany has succeeded in charting a fiscal policy course towards growth and sustainable public finances. This success goes hand-in-hand with the robust performance of the German economy. Economic growth is outpacing the growth rate of potential output, the German economy is producing at close to full capacity, and total employment – which now stands at an annualised average of 43 million persons – is at its highest level since German reunification.

In 2016, German fiscal policy will have a clearly expansionary impact on the economy, due to higher levels of government investment; tax relief for families, single parents and low income earners; rising levels of expenditure by social security funds; and substantially higher spending on measures to provide humanitarian assistance to and promote the integration of refugees. In the current situation, with the German econ-

omy near full capacity, a more expansionary fiscal policy is not advisable from an economic point of view, because it would heighten the risks of sectoral and regional imbalances, overheating, and fiscal instability, which would cause medium- and long-term damage to the economy in both Germany and the euro area.

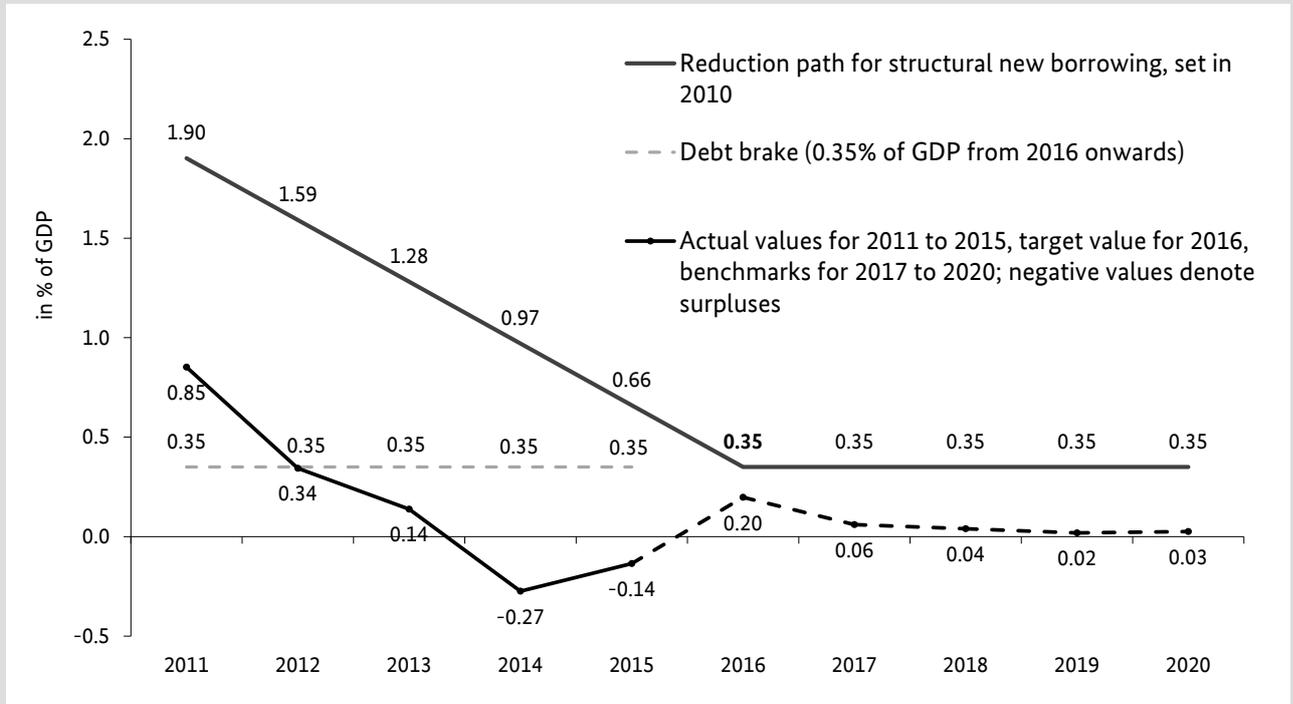
In addition, fiscal policies that aim to ensure stability must also take into account the fact that, although low interest rates clearly ease the burden on public budgets, current conditions on capital and financial markets must be viewed as both exceptional and of limited duration. To ensure that public budgets remain on secure footing in the future, governments must adopt fiscal policies that are prepared for the normalisation of global financial conditions.

Against this background, vigilant and forward-looking fiscal policies and a high degree of spending discipline are necessary in order to fully safeguard the government's ability to take effective action in the future and in the case of unexpected events. For this reason, the federal government is committed to the goal of achieving balanced budgets in the years from 2017 to 2020. Already in 2014 and 2015, Germany succeeded in closing its budget without any new borrowing. The 2016 federal budget, which was adopted in November 2015, also refrains from taking on any new debt. Furthermore, the federal government has committed itself to taking on no new debt in subsequent years as well. The federal cabinet reaffirmed this commitment on 23 March 2016 when it adopted its benchmark figures for the 2017 federal budget and the financial plan up to fiscal year 2020. Germany's Stability Programme for 2016 reflects these fiscal policy targets.

By staying on the path towards consolidation, the federal government is reinforcing the domestic sources of economic growth and bolstering the confidence of businesses and private citizens. Moreover,

this path has led to a steady reduction in structural debt and enabled the government to comply with constitutional debt brake requirements by solid margins (see Figure 3). In this way, the course has been set for the long-term sustainability of public finances. At the same time, the healthy state of public finances has given the federal government the leeway to provide targeted tax relief to taxpayers and to further improve the expenditure structure of the federal budget by targeting spending towards pro-growth investment in education, research and infrastructure.

Figure 3: Change in the Federation’s structural deficit (in % of GDP)



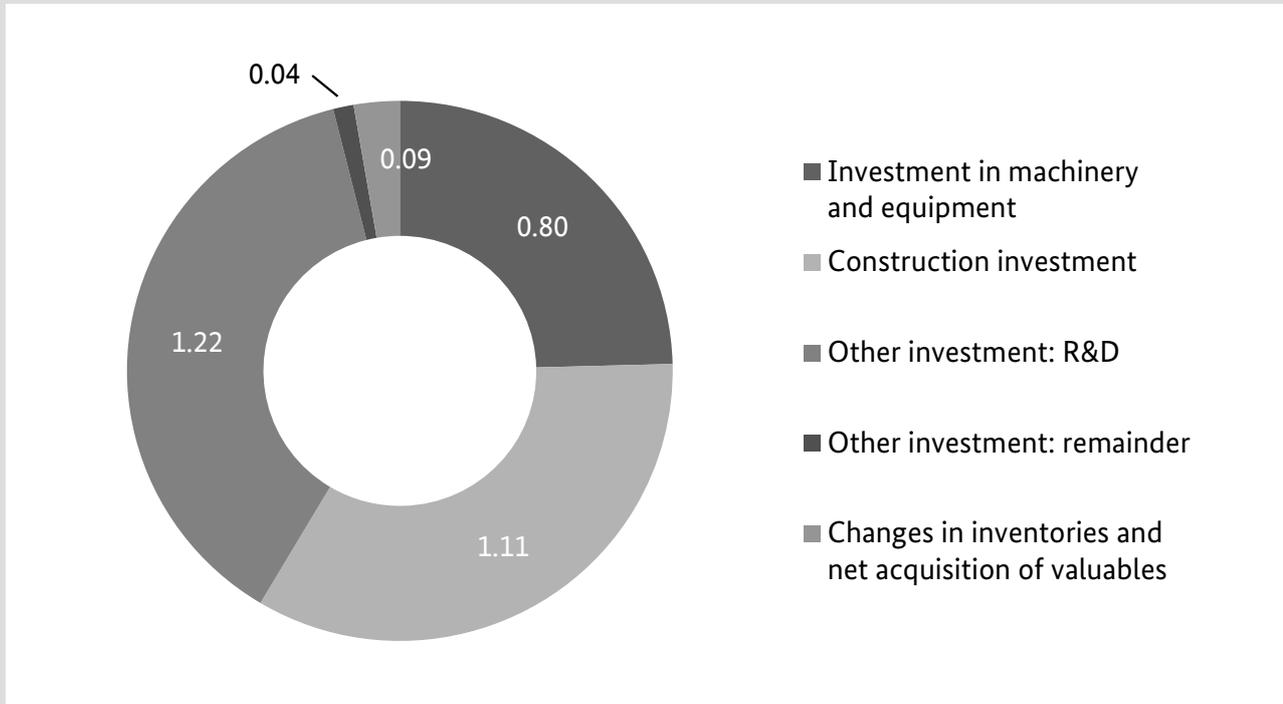
The financial balances of the Energy and Climate Fund, the *Aufbauhilfefonds* (a special relief fund established to remedy the damage caused by the June 2013 floods in Germany) and the Local Authority Investment Promotion Fund (*Kommunalinvestitionsförderungs-fonds*, a special fund to promote investment at the local authority level), all of which are relevant for determining the Federation’s structural deficit, are taken into account for the 2016–2020 projection period.

3.3 Fiscal policy measures on the expenditure and revenue side

As part of its strategy of growth-friendly consolidation, the federal government is increasing its spending in targeted areas that are conducive to economic growth. This focus is in line with the recommendations contained in the ECOFIN Council’s opinion (dated 14 July 2015) on Germany’s 2015 Stability Programme, which called on Germany to further increase public investment in infrastructure, education and research. In the period from 2009 to 2015, government investment in Germany has risen at a nominal rate of 3.3% per year on average. Invest-

ment in research and development (which is classified under “Other investment”) played a key role in driving this increase (see Figure 4). In the period from 2009 to 2015, general government investment increased at a substantially faster pace than overall government spending (which grew at a nominal rate of 2.5% per year on average). Government gross capital formation even grew by 4.2% in 2015, outpacing the increase in both general government expenditure and nominal GDP (which rose by 3.1% and 3.8%, respectively). R&D investment continued to make a positive contribution in 2015, while investment in machinery and equipment grew at a particularly fast pace.

Figure 4: Gross capital formation, average annual increase from 2009 to 2015 of 3.3%



Contribution by specific components (in percentage points).

The federal government played a key role in driving this positive momentum: first, by increasing investment at the federal level, and second, by providing support for investment at the *Länder* and local authority levels. In this way, the federal government continues to exert tangible influence on the priorities that are set for public investment. For example, in 2015 the federal government increased its investment in transport infrastructure and will continue to do so in the coming years. The 2016 federal budget allocates €12.3 billion for transport investment, and this amount is poised to rise to roughly €14.2 billion in 2018.

In Germany, most public investment is made by the *Länder* and local authorities. In order to open up additional scope for public investment, the federal government decided to provide targeted financial relief to the *Länder* and local authorities. During the current legislative period (since late 2013), the Federation is providing the *Länder* and local authorities with €6 billion in financial relief for the purpose of facilitating the expansion and upgrading of pre-school child care facilities, schools and higher education institutions. Also during the current legislative period, the Federation is allocating an additional €3 billion to promote research particularly within the framework of the Higher Education Pact, the Pact for Research and Innovation, and the Initiative for Excellence; some of the funding will also go to non-university research centres. Furthermore, the Federation is providing local

authorities with an additional €5 billion in the years from 2015 to 2018; €1.5 billion of this funding will be used to boost investment by local authorities in general, while the remaining €3.5 billion will flow into a special fund for the purpose of promoting investment by local authorities with inadequate financial resources. Many local authorities recently reported that – due to the multiple challenges associated with providing assistance to refugees – they were having difficulty adhering to the schedules they had previously set for the planning and implementation of investment projects. Due in part to local authorities' limited capacity to carry out complex investment projects, the federal government is planning to take steps to bolster their institutional capabilities. By the end of 2016, the federal government will restructure its agency for public-private partnerships (ÖPP Deutschland AG) and revamp the agency's strategy. The aim will be to pool expertise for the purpose of assisting local authorities that need help in planning and carrying out investment projects, thereby enabling them to implement such projects as cost-effectively as possible, regardless of which procurement method they choose. Furthermore, the Federation is providing local authorities with an additional €1 billion in financial relief per year in 2016 and 2017; the federal government plans to raise this amount to €5 billion per year on an ongoing basis starting in 2018.

In response to the large number of refugees entering Germany, the federal government adopted the Act to Expedite Asylum Procedures (*Asylverfahrensbeschleunigungsgesetz*), which puts in place additional important measures to help mitigate the financial burden on the *Länder* and local authorities. For example, the federal government increased the share of VAT revenue that is allocated to the *Länder*, a step that provided the *Länder* and local authorities with an extra €2 billion in revenue in 2015. In 2016, the VAT revenue allocated to the *Länder* is being increased by an additional

€3.6 billion; this amount includes €350 million to help the *Länder* and local authorities deliver assistance to unaccompanied refugee minors, as well as an additional €339 million to improve care and assistance for all refugee children. It also includes €2.9 billion as a down-payment by the Federation to the *Länder* and local authorities for its pledged share of the costs to cover (a) refugee assistance and accommodation and (b) additional administrative tasks associated with refugees. The costs are measured starting with the registration of refugees and ending with the issuance of a decision on their asylum application. The remainder of the Federation's share of the costs will be paid in autumn 2016 after a definitive calculation is made.

The in-migration of refugees is leading to a higher demand for housing. In the past, the federal government had stopped providing federal funding for subsidised housing, and paid partial financial compensation to the *Länder* instead. Given the current circumstances, the Federation has adopted legislative provisions to increase these compensation payments; in the years from 2016 to 2019, the Federation will support the *Länder* with an additional €500 million per year. During the parliamentary procedures to pass the 2016 budget, related federal measures were adopted that total approximately €4.2 billion; this includes the higher compensation payments to the *Länder* as well as discount-rate sales of federal property to the *Länder* and local authorities, which is to be used for subsidised housing. The federal government will provide additional funding for this purpose from 2017 onwards as well.

The federal government has made clear that it is placing a top priority on providing the financing to deliver humanitarian assistance to the large numbers of refugees and to carry out refugee-related tasks. At the same time, it is aware of the challenge that authorities must also pay attention to ensuring cost-efficiency, despite the

urgent need for action. In view of the fact that significant extra spending – the ultimate amount of which is difficult to predict – will be required to receive and accommodate asylum-seekers and refugees, the federal government set aside €5 billion in reserves for this purpose in its second supplementary budget for 2015. It was possible to increase the amount of these reserves to €12.1 billion, thanks to one-off effects that improved the final budget results for 2015. Bundesbank profits for the financial year 2015 added an additional amount of roughly €700 million to the reserves. Under current plans, €6.1 billion will be withdrawn from the reserves in 2016 to cover the extra spending that the Federation will have to make in response to the refugee situation. The remaining funds will enable the government to cover further costs in 2017 without having to take on new debt. No funds from these reserves will be available in 2018. For this reason, under the current financial plan, budget-wide savings of €6.7 billion will be required in 2018 in order to ensure a balanced budget with no new borrowing. This budget-wide savings requirement serves as a call for corresponding action by policy-makers when they prepare the 2018 federal budget. At the same time, it serves as a clear expression of the position held by the entire federal government that, for the years ahead, the door to new borrowing is closed.

To ensure sound fiscal and budget policies, it is essential not only to address current challenges but also to identify in advance basic spending trends and their medium- and long-term consequences, in order to facilitate the adoption of appropriate measures. For example, the effect of exceptionally low interest rates on debt service payments has greatly eased the burden on government budgets. These lower costs played a role in further reducing Germany's ratio of general government spending to GDP, which declined again in 2015 to 43.9%. However, this cannot allow policy-makers to lose sight of the fact that general govern-

ment spending on (a) social benefits other than social transfers in kind and (b) social benefits in kind has increased markedly at the same time; higher expenditures have been recorded for pensions, health care and long-term care, among other things. According to the government's projection, social spending will continue to rise at an above-average pace. These expenditure trends must be monitored diligently in order to ensure that public budgets are also still able to target expenditures towards areas that are crucial for future growth, including education, research and technology.

The revenue side of fiscal policy also contributes to growth and employment by providing a reliable tax policy framework and tax relief. In this area as well, the federal government is heeding the Council's recommendations. Germany's tax system is effective and fair overall. The federal government ensures that, in the face of international competition, the German tax system remains reliable, manageable and competitive. Due to the robust performance of the domestic economy in particular, together with record employment levels and rising wages and salaries, general government tax revenue recorded a substantial increase in 2015.

At the same time, the federal government is boosting business competitiveness and consumer purchasing power by providing targeted tax relief. For example, effective from 2016 onwards, the federal government is providing citizens with income tax relief totalling approximately €5 billion. In line with the findings of the federal government's 10th report on subsistence levels, the basic personal allowance and the tax allowance for children have been increased for 2016, as they were last year. In another step to reduce bracket creep, tax rates were modified by a total of just under 1.5% from 2016 onwards in order to account for the projected inflation rates for 2014 and 2015 as forecast in the federal government's 2015 spring projection. To help families that do not benefit from the tax allowance for children, the

government increased child benefit payments again in 2016. In addition, the child supplement for low-income families will be increased from July 2016 onwards. Furthermore, the amount of tax relief for single parents was increased and scaled according to the number of children.

In its revision of inheritance and gift tax, the federal government will take care to implement the requirements stipulated by the Federal Constitutional Court in its decision of 17 December 2014. To this end, the federal government aims to establish rules that are in conformity with the constitution and that simultaneously take into account the needs of small and medium-sized business, without fundamentally altering the tax model. This is intended to ensure smooth generational transitions within companies and to safeguard jobs.

Another major tax policy objective for the federal government during the current legislative period is to enact measures to combat cross-border profit-shifting by multinational companies. To this end, it is working together actively with its G20 partners to further develop international standards as part of the OECD's base erosion and profit-shifting (BEPS) project. A focal point of these efforts is to improve coordination between national tax systems, in order to close tax loopholes and to prevent harmful tax competition between countries.

Furthermore, Germany is committed to advancing the global standard on automatic exchange of financial account information. On 29 October 2014, 50 countries signed a binding treaty on this issue. The automatic exchange of information (AEOI) will start in mid-2017; the aim is to establish AEOI as an international standard for the purpose of curtailing tax flight and tax evasion by eliminating banking secrecy. Within the EU, the new standard is being implemented on the basis of the Mutual Assistance Directive (Council Directive 2011/16/EU), which was revised in December 2014. In Germany, the directive was transposed into national law

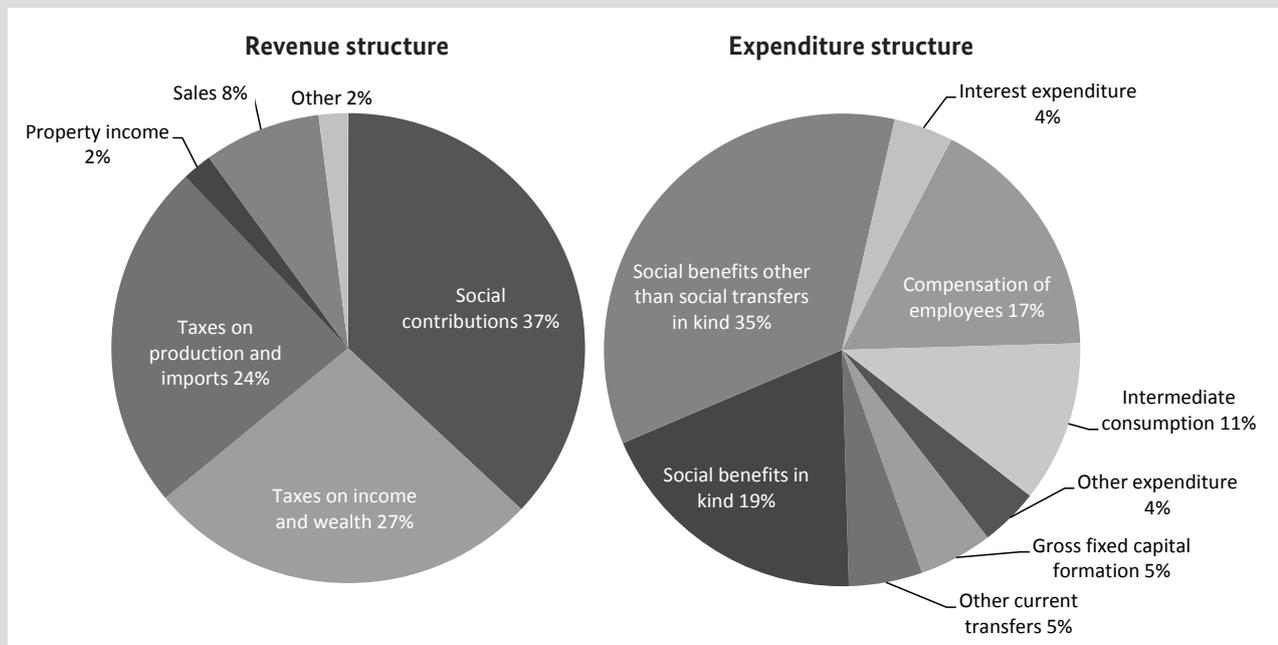
through the adoption of the EU Mutual Assistance Act (*EU-Amtshilfegesetz*) and the Act on the Exchange of Financial Account Information (*Finanzkonten-Informationsaustauschgesetz*) in late 2015.

Finally, the federal government also aims to further improve the efficiency of the German tax administration. Together with the *Länder*, it plans to restructure and modernise workflows in the tax administration with the aid of new technologies. To this end, on 9 December 2015, the federal cabinet adopted a draft bill to modernise taxation procedures. The new law is to enter into force on 1 January 2017; necessary secondary measures are expected to be implemented within six years.

3.4 Implementation of country-specific fiscal policy recommendations

The federal government's fiscal policy strategy and the measures described above address the country-specific fiscal policy recommendations issued by the Council on 14 July 2015. The Council recommends that Germany take action to increase public investment in infrastructure, education and research; to improve the conditions for private investment; to ensure adequate public investment also at the Land and local authority level; and to reduce the tax wedge, especially for low-wage earners.

Figure 5: The structure of revenues and expenditures in 2015



In its country report on Germany, which was published on 26 February 2016, the European Commission confirms Germany's progress in addressing the 2015 country-specific recommendations. The Commission also describes the economic challenges that Germany continues to face. Germany's 2016 National Reform Programme (NRP), which was adopted by the federal cabinet on 13 April 2016, contains a detailed description of the measures that the federal government is taking to address these challenges and to put the Council's country-specific recommendations into action. The 2016 NRP also reports on (a) the progress that has been achieved and the measures that have been adopted within the context of the Europe 2020 Strategy as well as (b) the implementation of the voluntary commitments set out in Germany's 2015 Action Programme for the Euro Plus Pact, which the federal government approved on 25 March 2015.

By carrying out successful policies to consolidate public budgets, including the substantial reduction in the general government debt-to-GDP ratio, and by taking the above-cited measures to boost public investment, Germany has fulfilled the voluntary fiscal policy commitments set out in Germany's 2015 Action Programme for the Euro Plus Pact.

4. General government budget balance and debt level: projection to 2020

Germany has set a structural balance of 0.5% of GDP as its MTO. This fulfils European rules¹ requiring general government budgets that are close to balance.

4.1 Trends in general government revenue and expenditure

Revenue ratio will remain stable

Revenue posted dynamic growth in 2015, rising by 3.9% in year-on-year terms. This positive result was driven in particular by good conditions on the labour market, with tax revenue and revenue from social security contributions increasing by 4.7% and 4.0%, respectively. The tax-to-GDP ratio grew from 22.6% to 22.8%.

In the projection period to 2020, tax revenue is expected to keep growing at a somewhat faster pace (just over 3.5% per year on average) than nominal GDP (3.3% per year). Accordingly, the tax ratio is expected to rise to approximately 23% of GDP by 2020. This

is due both to (a) rising incomes and favourable labour market conditions as well as (b) the fact that domestic demand, which is more tax-intensive, will make a larger contribution to aggregate economic activity than net exports. The year 2016 will be an exception here, because income tax relief measures will lead to a below-average increase in tax revenue.

Revenue from social security contributions rose slightly on the year in 2015, to 16.6% of GDP. While the contribution rate for general pension insurance was reduced by 0.2 percentage points, the contribution rate for long-term care insurance was increased by 0.3 percentage points. The medium-term budgetary projection also takes into account the additional 0.2 percentage point increase in the contribution rate for long-term care insurance that will take place in 2017.

The revenue ratio – which also includes other government revenue such as revenue from business activities and fees – is projected to stabilise at around 44½% of GDP in the coming years.

¹ Where not otherwise specified, all data contained in this projection are based on the definitions laid down in the 2010 European System of Accounts (in accordance with Regulation (EU) No 549/2013) and encompass core budgets and off-budget entities.

Table 1: Trends in the government revenue ratio

| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| | in % of GDP | | | | | |
| Taxes | 22.8 | 22 ¾ | 23 | 23 | 23 | 23 |
| Social contributions | 16.6 | 16 ¾ | 16 ¾ | 17 | 17 | 17 |
| Taxes & social contributions | 39.4 | 39 ½ | 39 ¾ | 40 | 40 | 40 |
| Total revenue | | | | | | |
| April 2016 Update | 44.6 | 44 ½ |
| April 2015 Update | 44 ¼ | 43 ¾ | 44 | 44 | 44 | - |

Differences between (i) the total tax ratio and (ii) the sum of the tax ratio and the social contribution ratio are due to rounding; Figures for the projection period are rounded to 1/4 percentage points of GDP.

Government expenditure increased by 2.9% in 2015. This increase was driven again by expenditures on social benefits (i.e. social benefits other than social transfers in kind as well as social benefits in kind), which grew by 4.4% on the year. Interest payments, which declined by 5.7% on the year, had a strong dampening effect on expenditure trends.

During the projection period, general government expenditure is expected to increase by roughly 3½% per year on average, with government consumption rising at a somewhat faster rate of 4% per year. Trends in public finances will be influenced by a number of social policy measures that the federal government has adopted during the current legislative period, such as an increase in housing benefits; funding for a recently adopted, more flexible form of parental benefits; full pensions under certain conditions starting at age 63; pension increases for mothers with children born before 1992; improved pensions for persons with reduced earning capacity; and increased funding for labour market policy

instruments. As a consequence, total social spending (i.e. social benefits other than social transfers in kind as well as social benefits in kind) will increase at an above-average pace, rising from 23.8% of GDP in 2015 to 24.7% of GDP by the end of the projection period (or from 54.3% of total government expenditure in 2015 to 55.7% by the end of the projection period).

The successes achieved in terms of consolidation benefit Germany in a variety of ways – for example, by reducing the debt-to-GDP ratio, which still exceeds the reference value of 60% of GDP, and by enabling targeted investments to maintain, upgrade and expand public infrastructure for the purpose of boosting economic growth. Overall, general government investment during the period from 2015 to 2020 is expected to rise by 4¾% per year on average, which means that investment will grow at a higher rate than total government spending. In this way, long-term trends will continue, but at an even faster pace: during the period from 2005 to 2015, public investment rose by 4.1% per year on average – at a high-

er rate than expenditure, revenue, and GDP during the same period. In recent years, the Federation has on multiple occasions, and using a variety of instruments, taken steps to set the conditions for a sustained increase in public investment. The benchmark figures for the draft federal budget and financial plan, which were adopted on 23 March 2016, provide for the continuation of the government’s programme of future-oriented investments and enable additional investment spending, particularly in the area of public infrastructure. In addition, in recent years and on numerous occasions, the Federation has helped the *Länder* and local authorities to cover the costs of social benefits, thereby freeing up *Länder* and local authority budget funds for increased investment, among other things. Furthermore, by setting up the Local Authority Investment Promotion Fund (*Kommunalinvestitionsförderungs fonds*), the Federation has created an instrument that will help local authori-

The large numbers of refugees coming to Germany are having a perceptible impact on the general government budget. In 2015, just under 1.1 million refugees were registered in the EASY system. According to current estimates, costs associated with refugee-related immigration are expected to require – compared with 2014 – additional budgetary resources totalling ½% of GDP per year in 2016 and 2017. All government levels will cover additional costs due to the refugee situation. However, the federal government is giving additional support to the *Länder* and local authorities to help them accommodate and provide care to refugees. The Federation has intensified its financial efforts substantially for 2016. In addition to extra social spending, the Federation is easing the financial burdens of the *Länder* and local authorities by allocating them additional VAT revenue.

Table 2: Trends in the government expenditure ratio

| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|--------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | in % of GDP | | | | | |
| April 2016 Update | 43.9 | 44 ½ |
| April 2015 Update | 44 | 43 ¾ | 43 ¾ | 43 ¾ | 43 ½ | - |

Figures for the projection period are rounded to 1/4 percentage points of GDP.

ties with inadequate financial resources to invest more money in public infrastructure. Consequently, fiscal consolidation has not been carried out at the expense of investment; on the contrary, successful consolidation policies have made it possible to increase investment.

Since expenditure trends are projected to outpace the nominal growth rate of GDP, the expenditure ratio is expected to rise to 44½ of GDP in the short term and stabilise at this level over the course of the projection period (see Table 2).

4.2 Trends in the government budget balance

The budget surplus of 0.7% of GDP in 2015 has enabled the Federation to put funds into the Local Authority Investment Promotion Fund and the Energy and Climate Fund and to set aside reserves needed to manage the tasks in connection with receiving and accommodating refugees and asylum-seekers in the coming years.

Two new priorities in this year's federal budget include (a) measures in connection with the influx of refugees and (b) internal and external security. To manage the influx of refugees, measures and funding will be targeted towards language instruction, integration programmes, the Federal Office for Migration and Refugees, and the federal police.

in the coming years. Factors that will have a mitigating impact on the general government budget balance include the stable upswing of the German economy – which will go hand-in-hand with stable revenue trends – and sustained low interest rates for the re-financing of government debt.

Taking these adverse and mitigating factors together, the government budget is expected to remain close to balance over the further course of the projection period.

All government levels avoided deficits in 2015

Positive fiscal balances at all levels of government contributed to the general government budget surplus that was achieved in 2015. This is the first time since German reunification that such an outcome has been achieved (after revision of the previ-

Table 3: Trends in the general government balance

| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|-------------------|-------------|------|------|------|------|------|
| | in % of GDP | | | | | |
| April 2016 Update | 0.7 | 0 | 0 | 0 | 0 | 0 |
| April 2015 Update | 1/4 | 0 | 1/4 | 1/4 | 1/2 | - |

Figures for the projection period are rounded to 1/4 percentage points of GDP.

Factors that will have an adverse impact on the general government budget balance in 2016 and in subsequent years are the increasing outflows of funds from (a) the Local Authority Investment Promotion Fund and the Energy and Climate Fund and (b) the reserves to cover the costs of tasks associated with the reception and accommodation of refugees and asylum-seekers. Thanks to consistent budget consolidation policies at all government levels, the *Länder* and local authorities are also well-equipped to manage the financial challenges posed by the influx of refugees. The social security funds will draw gradually on their reserves

ous year's results). In 2015, the Federation posted a surplus of 0.3% of GDP, while the *Länder* and local authorities each recorded surpluses of 0.1% of GDP. The social security funds generated a surplus for the sixth year in a row in 2015.

The federal government's projections proceed from the assumption that the Federation, *Länder* and local authorities will further reinforce their consolidation successes in the years up to 2020. This is illustrated at the federal level by the benchmark figures for the financial plan to 2020, which the federal cabinet adopted on 23 March 2016; these benchmark figures provide for federal budgets (in cash terms) that require no new borrowing whatsoever. With very few exceptions, every government level is expected to achieve balanced budgets in the coming years. A small deficit is expected at the federal level in 2016 due to the above-described factors; and in 2018, additional financial relief provided by the Federation is expected to lead to a surplus at the local authority level, while causing a corresponding deficit at the federal level.

The budgets of social security funds are expected to be balanced, or to post minor deficits, in the years from 2016 to 2020. Surpluses in recent years, especially in the statutory pension and health insurance funds, allowed these systems to build up large financial reserves. As long as deficits in the pension insurance system can be financed by drawing on reserves, increases in contribution rates will not be necessary.

Table 4: Budget balances according to government level

| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---------------------------|-------------|----------|----------|----------|----------|----------|
| | in % of GDP | | | | | |
| Central government | 0.3 | -1/4 | 0 | -1/4 | 0 | 0 |
| State government | 0.1 | 0 | 0 | 0 | 0 | 0 |
| Local government | 0.1 | 0 | 0 | 1/4 | 0 | 0 |
| Social security funds | 0.2 | 0 | 0 | 0 | 0 | 0 |
| General government | 0.7 | 0 | 0 | 0 | 0 | 0 |

Figures for the projection period are rounded to 1/4 percentage points of GDP.

4.3 Trends in the general government structural balance

Compliance with the medium-term budgetary objective will be achieved even in the face of current challenges

Since 2012, Germany has complied with its medium-term budgetary objective of a general government structural deficit no higher than 0.5% of GDP. Last year, the structural balance for the Federation, *Länder*, local authorities and social security funds was 0.8% of GDP. To determine the structural balance, the nominal balance is adjusted for cyclical influences in accordance with the common EU method. Furthermore, one-off effects are not taken into account in the structural balance; for the projection period, this applies in particular to proceeds from the spectrum auction in 2015. The cash proceeds received last year are reflected in the balance of national accounts during the first year when individual licences can be effectively used; they are consequently treated as one-off effects and the structural balance is adjusted accordingly.

According to the projection, Germany's structural balance will remain balanced throughout the entire projection period, with an output gap close to zero. This means that Germany will meet its medium-term budgetary objective throughout the entire 2016–2020 period. The appreciable decline in the structural balance to 0% of GDP in 2016 shows that Germany's fiscal policy is having an expansionary impact on the economy. Because Germany continues to meet its medium-term budgetary objective by a comfortable margin, the expenditure benchmark under Article 5 of Council Regulation (EC) No 1466/97 is not binding, in accordance with the *Specifications on the implementation of the Stability and Growth Pact*.

Table 5: Structural balance compared with actual balance and GDP trend

| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|------|------|------|------|------|------|
| Structural balance (% of GDP) | 0.8 | 0 | 0 | 0 | 0 | 0 |
| Actual balance (% of GDP) | 0.7 | 0 | 0 | 0 | 0 | 0 |
| Real GDP (% change yoy) | 1.7 | 1.7 | 1.5 | 1.6 | 1.6 | 1.6 |

Figures for the projection period are rounded to 1/4 percentage points of GDP.

4.4 Sensitivity of budget balance projection

Sensitivity analyses can provide indicators of how a projected budget balance could be affected in the event of deviations from the macroeconomic assumptions. The model used to analyse the sensitivity of the budget balance thus takes into account the possibility that the underlying macroeconomic assumptions may change. The sensitivity analysis looks at two alternative scenarios for what would occur as a result of

– the budget balance would remain at +¾% of GDP in 2016 and would increase in subsequent years. The negative alternative scenario – that is, if actual GDP growth were half a percentage point lower than the baseline scenario – would, in purely statistical terms, produce general government budget deficits from 2016 onwards; however, such deficits would be considerably smaller than the reference value of 3% of GDP. The sensitivity analysis shows that Germany's government budget is well-poised to continue complying with the guidelines of the Stability and Growth Pact.

Table 6: Sensitivity of the projection for the general government budget balance

| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|-----------------------------------|--|------|------|------|------|------|
| GDP trends according to | - general government budget balance in % of GDP - | | | | | |
| - baseline scenario | 0.7 | 0 | 0 | 0 | 0 | 0 |
| - alternative scenarios | | | | | | |
| • -½ pp p.a. compared to baseline | | -½ | -1 ½ | -1 | -1 | -½ |
| • +½ pp p.a. compared to baseline | | ¾ | 1 ½ | 1 ¼ | 1 | ¼ |

Figures for the projection period are rounded to 1/4 percentage points of GDP.

(1) a ½ percentage point reduction or (2) a ½ percentage point increase in the real GDP growth rate in the years from 2016 to 2020. All other assumptions remain the same, e.g. it is assumed that the GDP deflator and GDP composition remain constant vis-à-vis the baseline scenario. In addition, it is assumed that government revenue and expenditure will respond to the GDP scenarios in a manner consistent with their long-term elasticity. The budget semi-elasticity used in the European budgetary surveillance process is applied for such purposes. Under the positive alternative scenario – that is, if actual GDP growth were to exceed the federal government's annual projection (the baseline scenario) by half a percentage point per year

4.5 Trends in debt levels

After decades of rising debt-to-GDP ratios, successful consolidation policies have contributed to the necessary reversal of this trend. The debt-to-GDP ratio has declined consistently since 2013 (see Figure 6). It fell by 2.4 percentage points to 77.2% of GDP in 2013 and by 2.5 percentage points to 74.7% in 2014. By the end of 2015, it had declined by another 3.5 percentage points. Nevertheless, the debt-to-GDP ratio remains well above the Maastricht reference value of 60% and is still above the 2008 level of 64.9%, when the global financial crisis began.

points to 68¼% of GDP. The share of measures to combat the effects of the European sovereign debt crisis is projected to decline to 2.8% of GDP in the coming years, while the share of measures taken to address the global financial crisis is expected to fall to 6.3% of GDP during this period. Due to the favourable current situation, the debt-to-GDP ratio is expected to decline on a continuous basis to approximately 59½% by the end of the projection period.

This would mean that the debt-to-GDP ratio would fall to below 60% in the year 2020, thereby achieving one of the key objectives contained in the coalition agree-

Table 7: Trends in the debt-to-GDP ratio

| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|--------------------------|-------------------------------|-------------|-------------|-------------|-------------|-------------|
| | Debt ratio in % of GDP | | | | | |
| April 2016 Update | 71.2 | 68 ¼ | 65 ¾ | 63 ½ | 61 ¼ | 59 ½ |
| April 2015 Update | 71 ½ | 68 ½ | 66 | 63 ½ | 61 ½ | - |

Figures for the projection period are rounded to 1/4 percentage points of GDP.

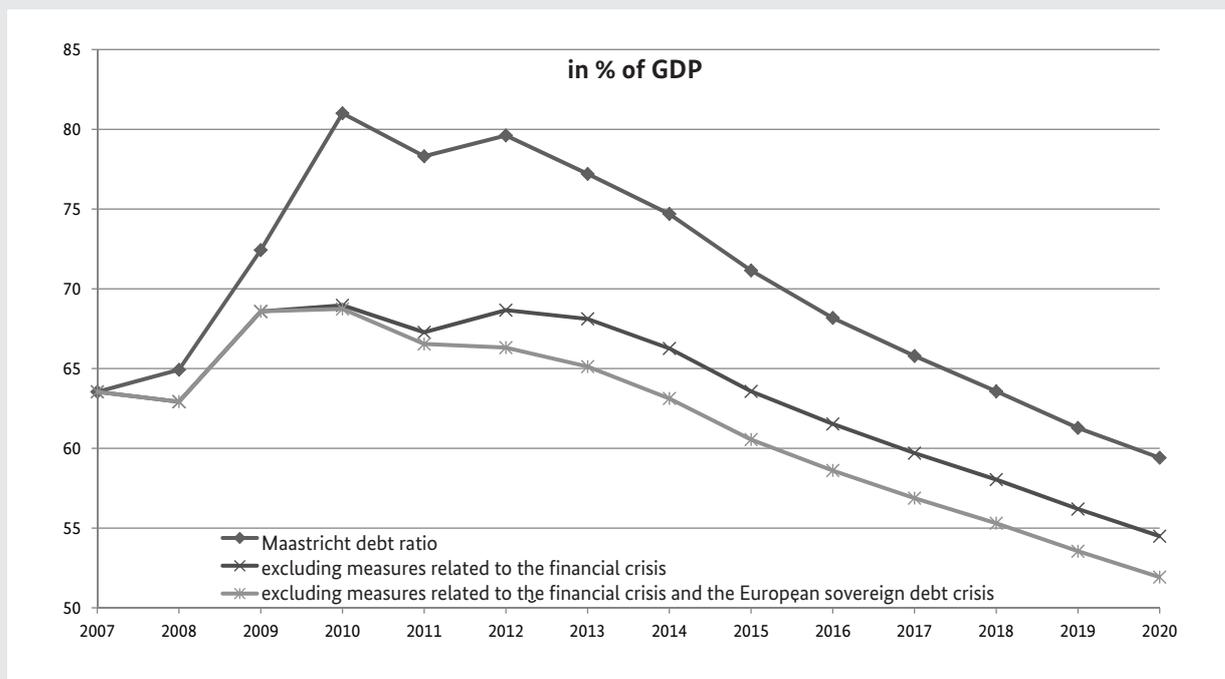
The decline in the debt ratio is due largely to the positive development of public budgets; at the same time, the resolution authorities set up during the global financial crisis (*FMS Wertmanagement and Erste Abwicklungsanstalt*) continue to wind down their portfolios successfully. The share of the Maastricht debt ratio attributable to measures taken to address the financial crisis declined by 1.1 percentage points to 7.1% in 2015. The share of debt attributable to measures to combat the European sovereign debt crisis remained constant in year-on-year terms at 3.1% of GDP.

The ongoing winding down of the resolution authorities' portfolios and the good condition of public budgets will continue to have a favourable impact on the debt ratio. This ratio is expected to continue its decline in 2016, falling by roughly 3 percentage

points between the current governing parties. The target of reducing the debt ratio to below 70% of GDP – in accordance with Germany's commitment as part of its 2015 Action Programme for the Euro Plus Pact – will be reached already in 2016.

Figure 6 illustrates the impact that measures taken in connection with the financial crisis and the European sovereign debt crisis have had on the development of Germany's debt-to-GDP ratio (Maastricht definition). Beginning in 2008, the debt ratio increased considerably as a result of measures to combat the financial crisis. The winding down of these measures is playing a key role in reducing the debt-to-GDP ratio. At the same time, measures related to the European sovereign debt crisis have led to a substantial increase in debt levels since 2012. However, when adjusted for these crisis-related effects, Germany's debt-to-GDP ratio has declined markedly since 2010 and will fall below the reference value of 60% already in 2016, thanks to the government's fiscal consolidation strategy and the favourable performance of the aggregate economy.

Figure 6: Debt impact of stabilisation measures taken in connection with the global financial crisis and the European sovereign debt crisis



5. Long-term fiscal sustainability and quality of public finances

5.1 Challenges to the sustainability of public finances

Fiscal policies that are geared towards long-term sustainability must take into account the risks that could constrain the state's future capacity to take effective policy action. Already today, Germany's public budget expenditures and social security spending are being driven by the forces of demographic change – the main feature of which is the ageing of the population. This trend will continue for the foreseeable future. According to the forecasts contained in Germany's 13th coordinated population projection, the share of the working-age population will decline while the share of persons aged 65 and over will rise.

The federal government is taking targeted action to address the challenges of demographic change and the associated fiscal tasks. In this connection, the federal cabinet resolved on 2 September 2015 to refine and strengthen its demographic strategy ("Every age counts: greater prosperity and better quality of life for all generations") before the government's next demography summit takes place in early 2017.

5.2 Government revenue and expenditure from a long-term perspective

Public budgets face the pressure of adapting to conditions that are undergoing long-lasting change. As the population ages, age-related spending will increase in proportion to GDP. Furthermore, as the number of pensioners rises while the number of persons paying into the social security system declines, public revenue will trend downwards. Once in every legislative period, the Federal Ministry of Finance submits a report on the sustainability of public finances, which serves an "early warning system" for a forward-looking fiscal policy. The most recent report was published on 17 February 2016.

The projections underlying the report's analysis are based on long-term scenarios that map out trends in public finances, under the assumption that current policies remain unchanged. The core indicators derived on this basis provide information on the extent to which action needs to be taken today in order to ensure sound public finances over the long term. One of these indicators is the "sustainability gap". The sustainability gap indicates how much fiscal consolidation would be required today in order to balance out all future expenditures (including accumulated government debt) against expected revenues. If this balance were to be achieved in a single step today, Germany's fiscal balance would have to be improved by an amount ranging from 1.2% to 3.8% of GDP, depending on the underlying population projection.¹

The sustainability gap may be smaller if demographic trends turn out to be more favourable than expected. For example, immigration could have a favourable impact if immigrants are able to gain a quick foothold in the labour market. Immigrants do not pay taxes and social security contributions until they successfully take up employment, and it is only at this point that they can make a positive contribution towards reducing the sustainability gap. But immigration alone cannot reverse demographic trends in Germany. At best, the ageing of society can be slowed by sustained higher birth rates. However, after decades of smaller successive generations in Germany, it is likely that the impact of higher future birth rates would be too small to make a significant contribution towards reducing the sustainability gap by 2060.

¹ In the report, long-term projections look at age-related spending in the following categories: pensions, health care, long-term care, unemployment benefits, education and family benefits. In the base year of 2014, this spending stood at 25.8% of GDP and accounted for approximately 60% of all public spending. By the year 2060, assuming no change in underlying conditions, age-related spending will increase by 3.3 to 6.9 percentage points to 29.1% to 32.7% of GDP.

Positive effects are more likely to be achieved if more women and older people enter or remain in the labour market. Lengthening people's effective working lives would likewise have positive effects. Apart from this, the long-term analysis contained in the report also confirms that the consolidation of public budgets in recent years has had a positive impact on the sustainability of public finances in Germany. This shows that, as society ages, it is reasonable policy to adopt budgets containing no new debt.

5.3 Measures to ensure long-term sustainability

By introducing constitutional rules limiting government debt – known as the "debt brake" – Germany established a solid framework for sound long-term fiscal policy. Additional key conditions for ensuring sustainable finances include sustainably financed social security systems as well as structural measures to promote higher labour force participation rates. To this end, the federal government has taken a number of measures in recent years to improve the balance between work and family life, to boost investment in education and research, and to improve education/training and the recruitment of skilled labour. Nevertheless further structural reforms are necessary in order to counteract the fiscal effects of an ageing population.

In recent years, Germany has carried out important reforms to the statutory pension insurance system – such as the phased increase of the standard retirement age to 67 – which have substantially improved the long-term financing of the public pension system. In order to ensure that the financial effects of the reforms are spread fairly across the younger and older generations, German pension law has established (a) upper limits to the contribution rates paid by individual workers and (b) guaranteed minimum pen-

sion payment levels. By enacting legislation to improve pension benefits, the federal government has fulfilled the social policy commitments set out in the coalition agreement between the current governing parties. Measures include (a) full pensions under certain conditions starting at age 63 and (b) pension increases for mothers with children born before 1992.

Looking at the long term, people who pay into the statutory pension insurance system must not be overwhelmed by demography-induced increases in pension payments. For this reason, starting in 2019, the Federation will allocate additional funds to the system, in order to stabilise pension fund revenue. This extra funding will start out at €500 million in 2019, rising in yearly increments to roughly €2 billion in 2022. In this way, the legally prescribed upper limits to contribution rates and the guaranteed minimum pension payment levels prescribed by law are to be maintained. In the area of health care, legislation to enhance the financial structure and quality of the statutory health insurance system has fixed the employer share of contributions at 7.3% of gross wages and salaries, thereby ensuring that the health care system is financed in a way that is conducive to employment. In the area of long-term care, the federal government established a long-term care reserve fund at the beginning of 2015. Revenue amounting to 0.1 contribution rate point will be allocated to the fund for a period of 20 years. From 2035 onwards, money will be drawn from the fund for the purpose of stabilising contribution rates.

5.4 Measures to increase the effectiveness and efficiency of public revenues and spending

In order to deploy scarce financial resources in a way that promotes economic growth, measures are needed to improve the quality of public finances while simultaneously paying increasing attention to sustainability criteria. In particular, subsidies are subject to regular review in accordance with the federal government's subsidy policy guidelines. The federal government's 25th Subsidy Report, published in August 2015, contains a first-ever sustainability review. This underscores the federal government's intention to ensure that its subsidy policies are geared more towards the principle of sustainability.

The federal government also aims to improve the effectiveness of the federal budget. To this end, spending reviews – i.e., analyses of both the revenue and expenditure sides of the budget – will be added to the government's budget process. These reviews will analyse in particular whether budget resources actually achieve their intended objectives and whether this takes place in accordance with the principles of sound financial management. The first review cycle has been concluded successfully, and the government will take the findings into account when it prepares the 2017 federal budget and the medium-term financial plan to 2020.

In the areas of health care and long-term care, reforms have taken effect that will help improve the quality and efficiency of the health care system over the medium and long term. For example, by adopting the E-Health Act (*E-Health-Gesetz*), which entered into force in 2016, the federal government is promoting digital networks in the health care system and modernising the legal framework for a reliable telematics infrastructure. The increasing use of digital technology in the health care system can help enhance both efficiency and the quali-

ty of care. The Hospital Structure Act (*Krankenhausstrukturgesetz*) aims to facilitate the shift towards more efficient, needs-based, patient-centred and high-quality health care structures. A €500 million structural fund is being established for this purpose. Adding to this an equivalent contribution by the *Länder* will result in a total of €1 billion that can be used to reduce excess capacity in hospitals and to promote hospital specialisation.

With the adoption of the Second Act to Enhance Long-term Care (*Pflegestärkungsgesetz II*), the federal government is introducing a new definition of the need for long-term care and expanding the law governing long-term care benefits. The new legislation will also lead to improved assessments of patients' long-term care needs, with the aim of improving the effectiveness of long-term care insurance expenditures. The new framework also aims to reduce bureaucracy – in particular by curtailing the documentation requirements for long-term care – for the purpose of cutting costs and making long-term care insurance expenditures more targeted and efficient.

Further information on individual measures can be found in the National Reform Programme.

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Table 8: Forecast of macroeconomic trends¹

| | ESA Code | 2015 Index 2010=100 | 2015 % | 2016 % | 2017 % | 2018 to 2020 (4) |
|--|-------------|---------------------------|---------------|-----------|-----------|---------------------|
| | | | % change p.a. | | | |
| 1. Real GDP, chain index | B1g | 107.85 | 1.7 | 1.7 | 1.5 | 1 ¾ |
| 2. GDP in respective market prices (€bn) | B1g | 3025.9 | 3.8 | 3.4 | 3.3 | 3 ¾ |
| Real utilisation of GDP, chain index | | | | | | |
| 3. Private consumption expenditure (2) | P.3 | 105.96 | 1.9 | 1.9 | 1.5 | 1 ¾ |
| 4. Government consumption expenditure | P.3 | 107.24 | 2.4 | 3.5 | 2.4 | 1 ¾ |
| 5. Gross fixed capital formation | P.51 | 111.36 | 2.2 | 2.3 | 2.6 | 1 ¾ |
| 6. Changes in inventories (GDP growth contribution) (3) | P.52 + P.53 | - | -0.4 | 0.0 | 0.0 | 0 |
| 7. Exports | P.6 | 123.93 | 5.4 | 3.2 | 4.3 | 4 ½ |
| 8. Imports | P.7 | 120.67 | 5.8 | 4.8 | 5.7 | 5 ¼ |
| Contributions to real GDP growth (3) | | | | | | |
| 9. Final domestic demand | | - | 1.5 | 2.1 | 1.8 | 1 ½ |
| 10. Changes in inventories and net acquisition of valuables | P.52 + P.53 | - | -0.4 | 0.0 | 0.0 | 0 |
| 11. External balance of goods and services | B.11 | - | 0.2 | -0.4 | -0.2 | 0 |

(1) 2015: Federal Statistical Office: As of: February 2016

2016 and 2017: results of the short-term forecast for the 2016 Annual Projection, January 2016

2018 to 2020: results of the medium-term forecast for the 2016 Annual Projection, January 2016

(2) Including private non-profit organisations without a commercial purpose

(3) Contribution to GDP growth rate

(4) Values rounded to 1/4

Table 9: Price developments – Deflators¹

| ESA Code | 2015 Index 2010=100 | 2015 % change p.a. | 2016 % change p.a. | 2017 % change p.a. | 2018 to 2020 (3) |
|---|---------------------------|-----------------------|-----------------------|-----------------------|---------------------|
| 1. GDP | 108.74 | 2.1 | 1.7 | 1.8 | 1 ¾ |
| 2. Private consumption expenditure (2) | 106.59 | 0.6 | 1.1 | 1.6 | 1 ½ |
| 3. Public consumption | 110.89 | 1.6 | 1.8 | 2.6 | 1 ¾ |
| 4. Gross capital formation | 108.47 | 1.3 | 1.5 | 1.7 | 1 ¾ |
| 5. Exports | 105.08 | 1.0 | 0.5 | 0.7 | 1 ¼ |
| 6. Imports | 102.59 | -1.6 | -0.5 | 0.7 | 1 ¼ |

(1) Federal Statistical Office: As of: February 2016

2016 and 2017: results of the short-term forecast for the 2016 Annual Projection, January 2016

2018 to 2020: results of the medium-term forecast for the 2016 Annual Projection, January 2016

(2) Including private non-profit organisations without a commercial purpose

(3) Values rounded to ¼

Table 10: Labour market trends¹

| | ESA Code | 2015 Level | 2015 % change p.a. | 2016 % change p.a. | 2017 % change p.a. | 2018 to 2020 (7) |
|---|----------|---------------|-----------------------|-----------------------|-----------------------|---------------------|
| 1. Employment, persons (domestic) (2) (m) | | 43.0 | 0.8 | 0.9 | 0.7 | ¼ |
| 2. Employment, hours worked (3) (bn hours) | | 59.0 | 1.1 | 1.1 | 0.5 | 0 |
| 3. Unemployment rate (4) (%) | | - | 4.3 | 4.5 | 5.0 | 5 ¼ |
| 4. Labour productivity (5) (2010=100) | | 102.8 | 0.9 | 0.8 | 0.8 | 1 ½ |
| 5. Labour productivity (6) (2010=100) | | 104.2 | 0.6 | 0.6 | 1.0 | 1 ½ |
| 6. Compensation of employees (€bn) | D.1 | 1540.3 | 3.9 | 3.6 | 3.5 | 3 |
| 7. Compensation per employee (thousand €) | | 39.8 | 2.7 | 2.4 | 2.6 | 2 ¾ |

- (1) 2015: Federal Statistical Office: As of: February 2016
 2016 and 2017: results of the short-term forecast for the 2016 Annual Projection, January 2016
 2018 to 2020: results of the medium-term forecast for the 2016 Annual Projection, January 2016
- (2) Employed persons, domestic concept
 (3) National accounts definition
 (4) Unemployed (ILO) / labour force
 (5) Real GDP per person employed (domestic)
 (6) Real GDP per hour worked
 (7) Values rounded to ¼; unemployment rate: value displayed is value for last year of forecast (2020)

Table 11: Sectoral balances¹

| | ESA Code | 2015 | 2016 | 2017 | 2018 to 2020 (2) |
|---|----------|------|------|------|---------------------|
| % of GDP | | | | | |
| 1. Net lending/borrowing vis-à-vis the rest of the world | B.9 | 8.6 | 8.5 | 8.1 | 7 ½ |
| of which: | | | | | |
| - Balance on goods and services | | 7.8 | 7.6 | 7.2 | 7 |
| 2. Net lending/borrowing of households | B.9 | 4.8 | 4.6 | 4.3 | 4 ¼ |
| 3. Net lending/borrowing of general government | | 0.7 | 0 | 0 | 0 |
| 4. Statistical discrepancy | | - | - | - | - |

(1) 2015: Federal Statistical Office: As of: February 2016

2016 and 2017: results of the short-term forecast for the 2016 Annual Projection, January 2016

2018 to 2020: results of the medium-term forecast for the 2016 Annual Projection, January 2016

(2) Values rounded to ¼; value for last year of forecast (2020)

Table 12: General government budgetary prospects

| | ESA Code | 2015 € bn | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|----------|--------------|----------|------------------|------------------|------------------|------------------|------------------|
| | | | % of GDP | | | | | |
| Net lending (EDP B.9) by sub-sector | | | | | | | | |
| 1. General government | S. 13 | 21.2 | 0.7 | 0 | 0 | 0 | 0 | 0 |
| 2. Central government | S. 1311 | 10.0 | 0.3 | - $\frac{1}{4}$ | 0 | - $\frac{1}{4}$ | 0 | 0 |
| 3. State government | S. 1312 | 2.3 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 4. Local government | S. 1313 | 4.1 | 0.1 | 0 | 0 | $\frac{1}{4}$ | 0 | 0 |
| 5. Social security funds | S. 1314 | 4.8 | 0.2 | 0 | 0 | 0 | 0 | 0 |
| General government (S.13) | | | | | | | | |
| 6. Total revenue | TR | 1.349.9 | 44.6 | 44 $\frac{1}{2}$ |
| 7. Total expenditure | TE (1) | 1.328.7 | 43.9 | 44 $\frac{1}{2}$ |
| 8. Net lending/borrowing | B.9 | 21.2 | 0.7 | 0 | 0 | 0 | 0 | 0 |
| 9. Interest expenditure | D. 41 | 48.5 | 1.6 | 1 $\frac{1}{2}$ | 1 $\frac{1}{4}$ | 1 $\frac{1}{4}$ | 1 $\frac{1}{4}$ | 1 $\frac{1}{4}$ |
| 10. Primary balance (2) | | 69.8 | 2.3 | 1 $\frac{1}{4}$ |
| 11. One-off and other temporary measures (3) | | 0.5 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| Selected components of revenue | | | | | | | | |
| 12. Total taxes (12=12a+12b+12c) | | 690.9 | 22.8 | 22 $\frac{3}{4}$ | 23 | 23 | 23 | 23 |
| 12a. Taxes on production and imports | D.2 | 326.1 | 10.8 | 10 $\frac{3}{4}$ | 10 $\frac{1}{2}$ | 10 $\frac{1}{2}$ | 10 $\frac{1}{2}$ | 10 $\frac{1}{2}$ |
| 12b. Current taxes on income, wealth, etc | D.5 | 364.7 | 12.1 | 12 | 12 $\frac{1}{4}$ | 12 $\frac{1}{2}$ | 12 $\frac{1}{2}$ | 12 $\frac{3}{4}$ |
| 12c. Capital taxes | D.91 | 0.0 | 0.0 | 0 | 0 | 0 | 0 | 0 |
| 13. Social contributions | D.61 | 501.2 | 16.6 | 16 $\frac{3}{4}$ | 16 $\frac{3}{4}$ | 17 | 17 | 17 |
| 14. Property income | D.4 | 23.3 | 0.8 | $\frac{1}{2}$ | $\frac{1}{2}$ | $\frac{1}{2}$ | $\frac{1}{2}$ | $\frac{1}{2}$ |
| 15. Other (4) | | 134.6 | 4.4 | 4 $\frac{1}{4}$ | 4 $\frac{1}{4}$ | 4 | 4 | 3 $\frac{3}{4}$ |
| 16. = 6. Total revenue | TR | 1.349.9 | 44.6 | 44 $\frac{1}{2}$ |
| p.m.: Tax burden (D.2+D.5+D.61+D.91-D.995) (5) | | 1.192.0 | 39.4 | 39 $\frac{1}{2}$ | 39 $\frac{3}{4}$ | 40 | 40 | 40 |

| | ESA Code | 2015 € bn | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|--------------------------------|--------------|------|----------|------|------|------|------|
| | | | | % of GDP | | | | |
| Selected components of expenditure | | | | | | | | |
| 17. Compensation of employees + intermediate consumption | D.1+P.2 | 374.4 | 12.4 | 12 ½ | 12 ½ | 12 ½ | 12 ¼ | 12 ¼ |
| 17a. Compensation of employees | D.1 | 230.7 | 7.6 | 7 ¾ | 7 ½ | 7 ½ | 7 ¼ | 7 ¼ |
| 17b. Intermediate consumption | P.2 | 143.7 | 4.7 | 5 | 5 | 5 | 5 | 5 |
| 18. Social payments (18=18a+18b) | | 721.6 | 23.8 | 24 ¼ | 24 ½ | 24 ½ | 24 ¾ | 24 ¾ |
| of which: unemployment benefits (6) | | 49.0 | 1.6 | 1 ½ | 1 ¾ | 1 ¾ | 1 ¾ | 1 ¾ |
| 18a. Social transfers in kind supplied via market producers | D.6311. D.63121. D.63131 | 252.3 | 8.3 | 8 ½ | 8 ¾ | 8 ¾ | 8 ¾ | 9 |
| 18b. Social transfers other than in kind | D.62 | 469.3 | 15.5 | 15 ¾ | 15 ¾ | 15 ¾ | 15 ¾ | 15 ¾ |
| 19. = 9. Interest expenditure | D.41 | 48.5 | 1.6 | 1 ½ | 1 ¼ | 1 ¼ | 1 ¼ | 1 ¼ |
| 20. Subsidies | D.3 | 26.8 | 0.9 | 1 | 1 | 1 | 1 | 1 |
| 21. Gross fixed capital formation | P.51 | 65.6 | 2.2 | 2 ¼ | 2 ¼ | 2 ¼ | 2 ¼ | 2 ¼ |
| 22. Capital transfers | D.9 | 30.3 | 1.0 | 1 | 1 | 1 | 1 | 1 |
| 23. Other (7) | | 91.6 | 3.0 | 3 | 2 ¾ | 3 | 3 | 3 |
| 24. = 7. Total expenditure | TE (1) | 1.328.7 | 43.9 | 44 ½ | 44 ½ | 44 ½ | 44 ½ | 44 ½ |
| p.m.: Government consumption (nominal) | P.3 | 586.7 | 19.4 | 20 | 20 ¼ | 20 | 20 | 20 ¼ |

(1) Adjusted by the net amount of payments in connection with swaps, so that TR - TE = B.9.

(2) The primary balance corresponds to (B.9. line 8) plus (D.41. line 9).

(3) A plus sign means deficit-reducing one-off measures.

(4) P.11+P.12+P.131+D.39+D.7+D.9 (except D.91)

(5) Including those collected by the EU and including an adjustment for uncollected taxes and social contributions (D.995), if appropriate.

(6) Includes cash benefits (D.621 and D.624) and in-kind benefits (D.631) related to unemployment benefits.

(7) D.29+D4 (except D.41)+ D.5+D.7+P.52+P.53+K.2+D.8

Figures for the forecast are rounded to one-quarter.

Table 13: No-policy change projections

| | 2015 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---------|------|----------|------|------|------|------|
| | €bn | | % of GDP | | | | |
| 1. Total revenue at unchanged policies | 1,349.9 | 44.6 | 44 ½ | 44 ½ | 44 ½ | 44 ½ | 44 ½ |
| 2. Total expenditure at unchanged policies | 1,328.7 | 43.9 | 44 ½ | 44 ½ | 44 ½ | 44 ½ | 44 ½ |

Figures for the forecast are rounded to one-quarter.

Table 14: Amounts to be excluded from the expenditure benchmark

| | 2015 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|--|------|------|----------|------|------|------|------|
| | €bn | | % of GDP | | | | |
| 1. Expenditure on EU programmes fully matched by EU funds revenue | 4.2 | 0.1 | ¼ | ¼ | ¼ | 0 | 0 |
| 2. Cyclical unemployment benefit expenditure | -7.4 | -0.2 | -¼ | 0 | 0 | 0 | 0 |
| 3. Effect of discretionary revenue measures | 3.4 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 4. Revenue increases mandated by law | -2.8 | -0.1 | 0 | 0 | 0 | 0 | 0 |

Figures for the forecast are rounded to one-quarter.

Table 15: General government debt developments (Maastricht debt ratio)

| | ESA Code | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|----------|----------|------|------|------|------|------|
| | | % of GDP | | | | | |
| 1. Gross debt | | 71.2 | 68 ¼ | 65 ¾ | 63 ½ | 61 ¼ | 59 ½ |
| 2. Change in gross debt ratio | | -3.5 | -3 | -2 ½ | -2 ¼ | -2 ¼ | -1 ¾ |
| Contribution to changes in the Maastricht debt ratio | | | | | | | |
| 3. Primary balance | | 2.3 | 1 ¼ | 1 ¼ | 1 ¼ | 1 ¼ | 1 ¼ |
| 4. Interest expenditure | D.41 | 1.6 | 1 ½ | 1 ¼ | 1 ¼ | 1 ¼ | 1 ¼ |
| 5. Stock-flow adjustment | | -0.1 | -¾ | -¼ | -¼ | -¼ | 0 |
| p.m.: Implicit interest rate on debt (1) | | 2.2 | 2 | 2 | 2 | 2 | 2 ¼ |

(1) Proxied by interest expenditure divided by the debt level of the previous year.

Figures for the forecast are rounded to one-quarter.

Table 16: Cyclical developments

| | ESA Code | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|--|----------|----------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | | % of GDP | | | | | |
| 1. Real GDP growth (%) | | 1.7 | 1.7 | 1.5 | 1.6 | 1.6 | 1.6 |
| 2. Net lending of general government | B.9 | 0.7 | -0.1 | 0.0 | -0.1 | 0.0 | 0.0 |
| 3. Interest expenditure | D.41 | 1.6 | 1.4 | 1.3 | 1.2 | 1.2 | 1.3 |
| 4. One-off and other temporary measures (1) | | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 |
| 5. Potential GDP growth (%) | | 1.5 | 1.6 | 1.7 | 1.6 | 1.5 | 1.6 |
| contributions: | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| - labour | | 0.6 | 0.5 | 0.6 | 0.4 | 0.2 | 0.3 |
| - capital | | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| - total factor productivity | | 0.6 | 0.6 | 0.7 | 0.8 | 0.8 | 0.8 |
| 6. Output gap | | -0.3 | -0.1 | -0.3 | -0.2 | -0.1 | 0.0 |
| 7. Cyclical budgetary component | | -0.2 | 0 | - $\frac{1}{4}$ | 0 | 0 | 0 |
| 8. Cyclically-adjusted balance (2 - 7) | | 0.9 | 0 | $\frac{1}{4}$ | 0 | 0 | 0 |
| 9. Cyclically-adjusted primary balance (8 + 3) | | 2.5 | 1 $\frac{1}{4}$ | 1 $\frac{1}{2}$ | 1 $\frac{1}{4}$ | 1 $\frac{1}{4}$ | 1 $\frac{1}{4}$ |
| 10. Structural balance (8 - 4) | | 0.8 | 0 | 0 | 0 | 0 | 0 |

1. A plus sign means deficit-reducing one-off measures.

Figures for the forecast related to government accounts are rounded to one-quarter.

Table 17: Divergence from previous update

| | ESA Code | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|--|----------|------------------|------------------|------------------|------------------|------------------|------------------|
| Real GDP growth (%) | | | | | | | |
| Previous update | | 1.5 | 1.6 | 1.3 | 1.3 | 1.3 | - |
| Current update | | 1.7 | 1.7 | 1.5 | 1.6 | 1.6 | 1.6 |
| Difference | | 0.2 | 0.1 | 0.2 | 0.3 | 0.3 | - |
| General government net lending (% of GDP) | | | | | | | |
| | B.9 | | | | | | |
| Previous update | | $\frac{1}{4}$ | 0 | $\frac{1}{4}$ | $\frac{1}{4}$ | $\frac{1}{2}$ | - |
| Current update | | 0.7 | 0 | 0 | 0 | 0 | 0 |
| Difference | | $\frac{1}{2}$ | $-\frac{1}{4}$ | $-\frac{1}{4}$ | $-\frac{1}{2}$ | $-\frac{1}{2}$ | - |
| General government gross debt (% of GDP) | | | | | | | |
| Previous update | | 71 $\frac{1}{2}$ | 68 $\frac{3}{4}$ | 66 | 63 $\frac{3}{4}$ | 61 $\frac{1}{2}$ | - |
| Current update | | 71.2 | 68 $\frac{1}{4}$ | 65 $\frac{3}{4}$ | 63 $\frac{1}{2}$ | 61 $\frac{1}{4}$ | 59 $\frac{1}{2}$ |
| Difference | | $-\frac{1}{4}$ | $-\frac{1}{2}$ | $-\frac{1}{4}$ | $-\frac{1}{4}$ | $-\frac{1}{4}$ | - |

Figures for the forecast related to government accounts are rounded to one-quarter.

Table 18: Long-term trends in age-related general government expenditure

| | 2010 | 2020 | 2030 | 2040 | 2050 | 2060 |
|---|---|-------------|-------------|-------------|-------------|-------------|
| | Expenditure in % of GDP (pessimistic basic variant "T-" / optimistic basic variant "T+") | | | | | |
| Pension expenditure (1) | 9.9 | 9.7 / 9.5 | 10.7 / 10.0 | 11.7 / 10.9 | 12.4 / 11.3 | 13.3 / 11.8 |
| Healthcare expenditure (2) on statutory health insurance and medical assistance payments for civil servants | 7.1 | 7.8 / 7.8 | 8.2 / 8.0 | 8.5 / 8.2 | 8.6 / 8.1 | 8.7 / 8.0 |
| Long-term care expenditure (3) | 0.8 | 1.0 / 1.0 | 1.3 / 1.2 | 1.7 / 1.5 | 2.2 / 1.8 | 2.5 / 1.8 |
| Unemployment benefits (4) | 3.7 | 2.4 / 2.2 | 3.0 / 1.6 | 2.9 / 1.5 | 2.9 / 1.5 | 2.9 / 1.5 |
| Spending on education and childcare (5) | 4.1 | 4.0 / 4.0 | 4.2 / 4.2 | 4.2 / 4.3 | 4.1 / 4.2 | 4.2 / 4.4 |
| Expenditure on the family benefits system (6) | 1.8 | 1.6 / 1.6 | 1.6 / 1.7 | 1.6 / 1.7 | 1.6 / 1.7 | 1.6 / 1.7 |
| Total age-related expenditure | 27.1 | 26.3 / 26.0 | 28.6 / 26.6 | 30.3 / 28.0 | 31.4 / 28.5 | 32.7 / 29.1 |
| | Assumptions | | | | | |
| Productivity growth (%) (7) | 0.6 | 1.0 / 0.9 | 1.9 / 1.9 | 1.8 / 2.0 | 1.6 / 1.8 | 1.6 / 1.9 |
| GDP growth (%) | 0.9 | 1.4 / 1.4 | 1.1 / 1.8 | 0.9 / 1.5 | 0.9 / 1.6 | 0.7 / 1.5 |
| Labour force participation rates (%) | | | | | | |
| - Men (15 to 64) | 84.5 | 85.4 / 85.0 | 86.0 / 86.5 | 85.9 / 86.4 | 85.9 / 86.4 | 86.1 / 86.7 |
| - Women (15 to 64) | 74.6 | 79.6 / 78.5 | 82.2 / 82.6 | 82.5 / 82.8 | 83.0 / 83.3 | 83.5 / 84.0 |
| Unemployment rate (%) | 6.4 | 3.8 / 3.6 | 5.5 / 3.0 | 5.5 / 3.0 | 5.5 / 3.0 | 5.5 / 3.0 |
| Old-age dependency ratio | 31.1 | 35.1 / 34.7 | 46.9 / 45.0 | 54.7 / 50.2 | 58.6 / 51.2 | 64.1 / 53.7 |
| Total population (m) | 81.7 | 81.5 / 82.2 | 79.6 / 81.9 | 76.8 / 80.6 | 73.2 / 78.8 | 69.2 / 76.9 |
| Population aged 65+ (m) | 16.8 | 18.4 / 18.4 | 22.2 / 21.8 | 23.9 / 23.4 | 24.0 / 23.2 | 23.9 / 23.2 |

Table 18: Continuation

The values shown have been consolidated to take into account cross-payments between individual sub-budgets. Last update of the projections (2020–2060): 2010 base year, data and legal situation as of 30 June 2015.

Sources: actual values for 2010: Federal Statistical Office, German Pension Insurance, Federal Ministry of Health, Federal Employment Agency, Federal Ministry of Labour and Social Affairs, Federal Ministry of Finance, Federal Ministry for Family Affairs, Senior Citizens, Women and Youth; projections (2020–2060): Professor Martin Werding (Ruhr-Universität Bochum), projections for the fourth Sustainability Report by the Federal Ministry of Finance, Cologne 2016.

- (1) Statutory pension insurance and civil servants' pension.
 (2) Statutory health insurance and medical assistance payments for civil servants and eligible relatives.
 (3) Long-term care insurance.
 (4) Unemployment insurance, other expenses of the Federal Employment Agency and basic provision for job seekers (including accommodation costs).
 (5) Public education spending (including child-care facilities) according to the definition used in the Education Finance Report.
 (6) Child benefit, tax-free allowances for children under the Income Tax Act, parental benefit.
 (7) Measured by labour productivity.

Comments: The figures shown reflect two variants: "T-", which is based throughout on slightly pessimistic assumptions, and "T+", which is based throughout on slightly optimistic assumptions. Figures on productivity growth and GDP growth refer to changes compared with the previous 10-year period. The old-age dependency ratio is based on the definition of a working-age population as aged 15–64.

Table 19: Technical assumptions

| | 2015 | 2016 | 2017 | 2018 to 2020 |
|---|------|------|------|--------------|
| Short-term interest rate (annual average in %) | 0.05 | 0.05 | 0.05 | 0.05 |
| USD/€ exchange rate (annual average) | 1.11 | 1.09 | 1.09 | 1.09 |
| Growth of German sales markets (in %) (1) | 2.3 | 3 ¼ | | 4 ¼ |
| Oil price (Brent, USD/barrel) | 52 | 34 | 40 | 47 |

(1) Values rounded to 1/4.

Table 20: Contingent liabilities

| % of GDP | 2015 |
|-----------------------------------|-------------|
| Public guarantees | 16.4* |
| Of which: linked to the financial | 0.6 |

* Year 2014



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