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EXECUTIVE BOARD MEETING

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To: Members of the Executive Board

From: The Acting Secretary

Subject: **Germany—Staff Report for the 2016 Article IV Consultation**

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Questions:	Ms. Detragiache, EUR (ext. 36376) Mr. Vandenbussche, EUR (ext. 36676) Ms. Pereira, EUR (ext. 39452) Mr. Natal, EUR (ext. 35983) Mr. Xie, EUR (ext. 38366)
Document Transmittal in the Absence of an Objection and in accordance with Board policy:	Forthwith—European Central Bank Monday, June 20, 2016—WTO After Board Consideration—Caribbean Development Bank, European Commission, Organisation for Economic Cooperation and Development

***Unless an objection from the authorities is received prior to the conclusion of the Board's consideration, the document will be published.**

GERMANY

STAFF REPORT FOR THE 2016 ARTICLE IV CONSULTATION

June 9, 2016

KEY ISSUES

Context

Growth this year is expected to remain moderate as strong domestic demand—buoyed by a fiscal expansion, a strong labor market, favorable monetary conditions, and lower energy prices—is offsetting weak external demand. Medium-term potential growth is projected to decline as the population ages. This keeps savings up and holds back domestic investment, contributing to the large and persistent current account surplus. Housing supply is slow to respond to swelling demand, putting pressure on prices in some areas. In the financial sector, the new supervisory and regulatory architecture is being implemented and the low interest environment is exacerbating underlying structural challenges.

Key policy recommendations

Germany should accelerate structural reforms to raise its declining growth potential and speed up rebalancing. A more dynamic Germany would also benefit the fragile recovery in the euro area. In the financial sector, the new regulatory and supervisory architecture needs to be completed and transition risks managed.

- Foster the integration in the labor market of women, older workers, and refugees.
- Spur competition to increase productivity in the services sector.
- Make more rapid progress toward meeting public infrastructure needs, while tackling administrative bottlenecks.
- Remove impediments to housing supply expansion to relieve pressure on house prices, and develop the legal basis for real-estate-related macroprudential tools to better contain potential future excesses.
- Continue to enhance bank supervision to meet tighter new international standards, with a particular focus on risk management, internal controls, and the oversight role of supervisory boards, including through expanded data collection.
- Together with the relevant European authorities, complete the new bank resolution and crisis management agenda.

Approved By
Mahmood Pradhan (EUR) and Sanjaya Panth (SPR)

Discussions took place in Berlin, Bonn, Frankfurt, and Nuremberg during April 27–May 9. The staff team comprised Ms. Detragiache (head), Messrs. Natal, Vandenbussche, and Xie, and Ms. Pereira (all EUR). Ms. Erbenova (MCM), head of the FSAP team, joined the final part of the mission. The team was supported from headquarters by Mses. Burova and Maneely (all EUR). Mr. Meyer (OED) participated in the discussions. The mission met with Parliamentary State Secretary Spahn, Bundesbank President Weidmann, officials from the Federal Chancellor's office, the Finance, Economic Affairs, Transport, Labor, and Environment Ministries, the Bundesbank, the Federal Office for Migration and Refugees, the Monopolies Commission, representatives from the social partners, the banking and insurance sectors, think tanks, and academics.

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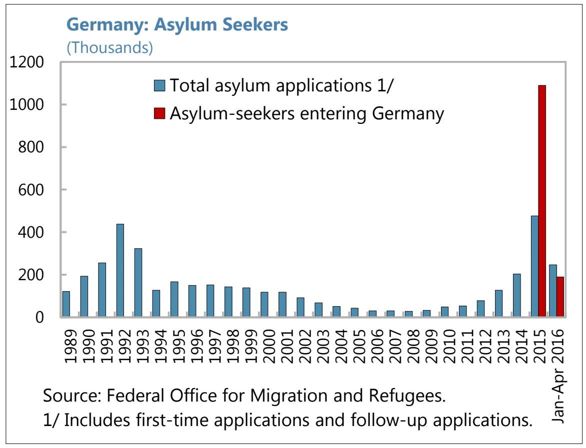
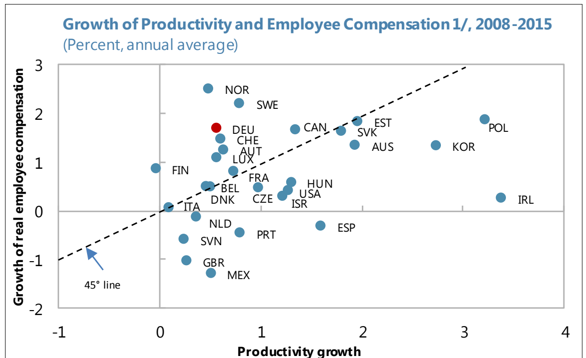
CONTEXT

1. **The growth momentum remains steady as strong domestic demand is offsetting weak foreign demand.** Private consumption growth reached a 15-year high last year (Figure 1), while public consumption surged to accommodate higher social benefit spending and provide support to a record number of asylum-seekers. The recovery of investment in machinery and equipment continued as capacity utilization remained above historical averages. Buoyant domestic final demand, however, was partly countered by a slowdown in import demand from trading partners, which translated into stagnating exports in the second half of last year.



Source: Federal Office for Migration and Refugees.
1/ Includes first-time applications and follow-up applications.

2. **In spite of a tight labor market, prices have been nearly flat over the past year, due to falling energy prices.** Core inflation remained low and stable around 1 percent, while the GDP deflator rose by 2.1 percent in 2015. Real wages remain dynamic and keep outpacing labor productivity (Figure 2). Employment growth has been supported by persistently high economic immigration and has remained robust in spite of the implementation of an early retirement scheme. The unemployment rate, at 4.2 percent, reached a new post-reunification low in March. So far, the introduction of a statutory minimum wage on January 1, 2015 has not had a visible impact on average wage growth or the aggregate employment trend (Box 1).



Sources: OECD and IMF staff calculations.
1/ Productivity and employee compensation are measured per hour worked.

3. **External imbalances are widening reflecting new shocks.** The current account surplus continued to widen significantly in 2015, reaching 8.5 percent of GDP, reflecting lower commodity prices and currency effects (Figure 3). It is now the second largest in the world behind China's when measured in U.S. dollars. The narrowing of the oil and gas trade deficit accounted for 62 percent of the trade surplus increase. In addition, lower oil prices (together with lower lending rates) have stimulated global demand for automobiles, benefiting German exports (Box 2). On a regional basis, the surplus vis-à-vis the rest of the euro area widened by 0.7 percent of GDP, as the energy deficit with the Netherlands shrank. Exports to Asia, on the contrary, decelerated reflecting the ongoing rebalancing in China. From a saving-investment balances perspective, the surpluses of non-financial corporations and the general government, at 4.0 percent and 0.7 percent of GDP respectively, reached their highest levels since 2000. By end of 2015, the CPI-based real effective exchange rate had depreciated by 5.3 percent from its 2014 average primarily as a result of nominal depreciation vis-à-vis the dollar and the renminbi.

4. **The persistent CA surplus has boosted the Net International Investment Position (NIIP).** The NIIP reached 48.3 percent of GDP at end-2015 (2.2 percent of world GDP), with gross assets exceeding 256.3 percent of GDP. The net direct investment position was 18.2 percent of GDP and the net portfolio position was 3 percent of GDP at end-2015. Foreign claims of German banks declined sharply after the global financial crisis, from 95 percent of GDP in 2008 to 59 percent of GDP by end-2015, with an exposure to major emerging markets of less than 5 percent of the total. In general, foreign assets are well diversified by instrument, while a sizable share of foreign liabilities consists of government bonds. The implicit return earned on assets has been higher than that paid on liabilities by 0.6 percentage points on average over 2010–15. However, adverse valuation effects have kept the pace of NIIP build-up short of the cumulated capital outflow recorded in the financial account (6 percent of GDP cumulative over 2010–15).

5. **Strong revenues supported the fiscal balance in 2015.** The general government surplus rose to 0.6 percent of GDP (from 0.3 percent in 2014), on the back of buoyant revenue—due to robust growth of employees compensation and domestic demand—and declining interest payments (Figure 4). However, the structural balance remained constant at 0.7 percent of GDP, resulting in a neutral fiscal stance. The unforeseen spending associated with the refugee inflow (about ¼ percent of GDP in 2015) was comfortably accommodated within the government's budget target. Public debt declined to 71 percent of GDP, while the federal government met for the second consecutive year its commitment to no new net borrowing (the so-called "black zero").

6. **Credit growth, long subdued, is picking up, and housing price inflation continues to outstrip disposable income growth.** Following the implementation of QE by the ECB, negative yields on government bonds now extend to maturities up to 8 years and bank lending rates have declined to historically low levels (Figure 5). After years of stagnation, real credit growth accelerated to 3 percent in early 2016, half of it accounted for by the mortgage segment, as borrowers took advantage of record-low interest rates. As a result, housing prices keep trending up in the context of a slow supply response to surging housing demand. Though firms continue to finance most of investment needs from retained earnings and cash reserves, credit to non-financial corporations is also picking up somewhat as bank lending standards are gradually loosened.

7. **The banking sector faces multiple challenges, which translate into low profitability.** Negative interest rates have not been passed on to retail depositors so far. Thus, while they stimulate credit demand, they erode net interest margins, especially in banks with traditional business models. The aggregate cost-to-income ratio is high in international comparison, while technological changes and the new regulatory environment require business model adaptation. Further consolidation to cut costs, especially among the large number of small retail-focused institutions, is proceeding but slowly. During market turbulence earlier this year, the equity prices of the largest German bank declined more markedly than those of other global banks, and its CDS spreads climbed more rapidly, possibly indicating market concerns about future profitability in the context of ongoing restructuring (Figure 6).

OUTLOOK, EXTERNAL ASSESSMENT, AND RISKS

The economy is projected to slowly rebalance, with domestic demand supported by the tight labor market, accommodative monetary conditions, and, in 2016, a fiscal expansion. Declining medium-term growth prospects, however, continue to hold back domestic investment and push up savings, preventing faster rebalancing.

8. **Domestic demand is expected to keep underpinning the moderate growth momentum.** A sizable fiscal expansion (see below), further ECB monetary stimulus since March, and lower energy prices should continue to offset the weakness in key advanced and emerging countries. Private consumption should remain dynamic as real disposable income, while residential investment should pick up further to respond to growing needs (see below). All in all, GDP is projected to grow by 1.7 percent this year and 1.5 percent next year, with a small positive output gap opening up. Continued large net immigration and the gradual absorption of the refugees into the labor market over the short-to-medium term will help meet growing labor demand, though the unemployment rate is likely to bottom out as refugees will face obstacles in finding employment. Headline inflation will rise as a result of the recent ECB policy actions as well as the small positive output gap, but will do so only gradually, and will reach two percent only over the medium-term. In light of the relative cyclical positions and rebalancing needs within the monetary union, inflation in Germany should remain above the euro area average over the medium-term.

9. **A foreseen fiscal expansion of 1 percent of GDP in 2016 comes at an opportune time, as, if it materializes, it will cushion the effect of slowing foreign demand, though revenues might again surprise on the upside.** The expansion reflects higher planned social transfers, refugee-related spending, and, to a lesser extent, higher public investment and income tax relief. Altogether the structural balance is expected to fall to -¼ percent of GDP in 2016 and remain constant in 2017, slightly above the lower bounds imposed by the fiscal rules (Germany's Medium Term Objective under the Stability and Growth Pact (MTO) and the national "debt brake"). However, over recent years, tax revenues have systematically overperformed forecasts due to better-than-expected labor market developments (though over the longer run there has been no systematic bias).[1] Refugee-related spending should reach ½ percent of GDP per year in 2016 and 2017, although there is uncertainty around this estimate. At the federal level, despite a small deficit expected in 2016, the government should be able to fulfill its "no net new borrowing" political commitment by spending reserves accumulated in 2015. The debt sustainability analysis (DSA) shows that fiscal risks should be manageable, with no severe adverse effects on public debt dynamics (Annex I).

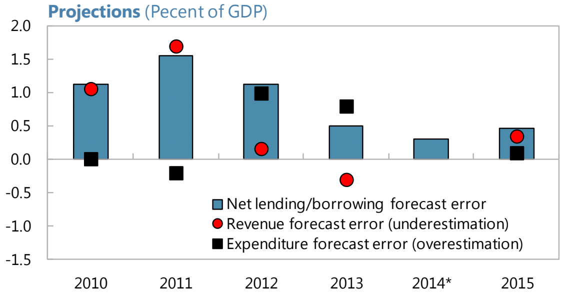
[1] The projections are prepared by the Working Party for Tax Revenue Estimates, a body including representatives from the federal and regional governments, academia, and the Bundesbank. Decisions are made by consensus. Although methodologies differ, the macroeconomic scenario used by all members is the same. Thus, forecast errors in the macroeconomic assumptions would be reflected in all the estimates.

Germany: General Government Operations

	2013	2014	2015	2016 Proj.	2017 Proj.
Net Lending/Borrowing	-0.1	0.3	0.6	-0.1	0.1
Structural Balance	0.1	0.7	0.7	-0.3	-0.3
of which, Structural Balance of the Central Government	-0.1	0.6	0.3	-0.1	-0.2
Change in structural balance	0.3	0.6	0.0	-1.0	0.0
SGP Medium Term Objective (General Government)	-0.5	-0.5	-0.5	-0.5	-0.5
Debt Brake Floor (Central Government)	-0.35	-0.35	-0.35	-0.35	-0.35
Public gross debt (Maastricht definition)	77.2	74.7	71.2	68.5	66.2

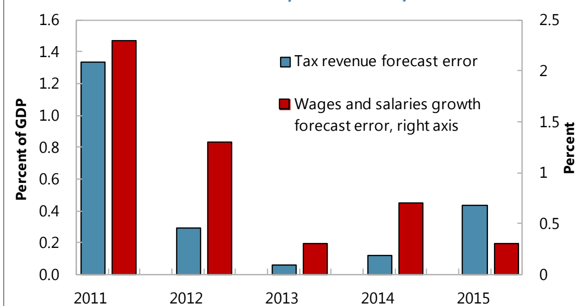
Sources: Ministry of Finance, Bundesbank, Federal Statistical Office, and IMF staff estimates and projections.

Over-performance: Actual Fiscal Balance less Stability Program Projections (Percent of GDP)



* The change in national accounts system from ESA1995 to ESA2010 does not have a relevant impact on the balance outturn (see 2015 Stability Program update). However, it does not allow a precise decomposition of the net-lending forecast error in 2014.
Sources: Stability Program projections, Destastis, and IMF staff calculations.

Tax Revenue Forecast Bias, 2011-2015 1/



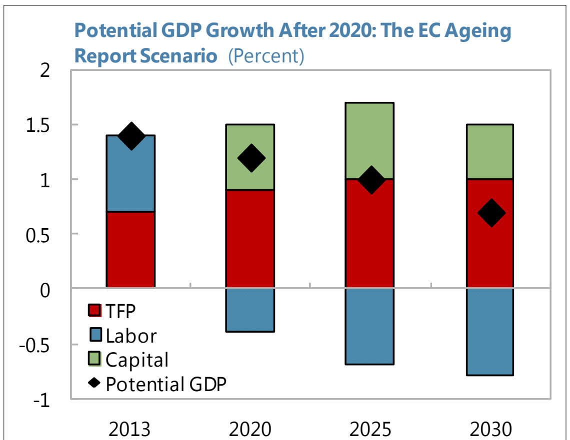
1/ Forecast errors are computed as the difference between the actual values and the forecast as of November of the previous year (relevant for the budget formulation). Social security contributions are not included.
Sources: Bundesbank, Federal Ministry of Finance, and IMF staff calculations.

10. **In 2015, the external position continued to be substantially stronger than implied by medium-term fundamentals and desirable policy settings**. The cyclically-adjusted current account balance stood at 8.8 percent of GDP in 2015, 3–6 percentage points of GDP above the assessed norm of 2.5–5.5 of GDP (Annex II). The wide interval reflects the high sensitivity of the norm to uncertain demographic factors, including future immigration. The REER in 2015 is assessed as undervalued by 10–20 percent, up from 5–15 percent in 2014. In 2016, the oil and gas trade balance should narrow further as energy prices remain lower on average than in 2015, while the lagged effects of the past real effective exchange rate depreciation will counterbalance the slowdown in external demand. Continued strong wage growth and the fiscal expansion, on the other hand, should push up imports.

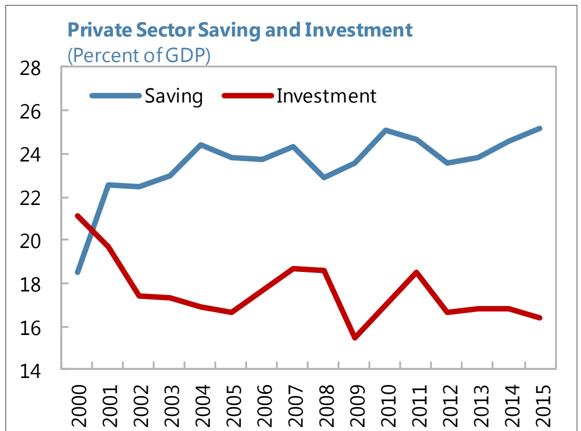
11. **Over the medium-term, the surplus is expected to slowly decline**. The rebalancing process will unfold as the terms of trade windfall is spent, energy prices partially recover, the output gap becomes positive, and increasing unit labor costs relative to euro area trading partners realign price competitiveness. However, at 6.8 percent in 2021, the current account surplus is projected to remain outside the assessed norm, while the (NIIP) will continue to grow rapidly, reaching over 80 percent of GDP by 2021. Based on the EBA model estimation results, in 2015 if fiscal gaps in Germany and its trading partners were closed, Germany's current account surplus would have been

lower by some 1.5 percentage points of GDP. The remaining CA gap that is not explained by identified policy distortions likely reflects the short-term factors mentioned above (such as the unspent terms of trade windfall), as well as the limited nominal exchange rate adjustment because of the currency union.

12. **A range of policies could be considered that would strengthen the external rebalancing relative to the baseline scenario.** The foreseen adjustment process is sluggish because medium-term growth prospects will keep a damper on domestic investment, while population aging combined with expectations of slow future income growth will continue to keep savings high. Structural reforms that increase future growth prospects could help reverse these factors and strengthen the rebalancing process. For instance, model simulations show that higher labor supply by female workers, better refugee integration, and pension reforms to prolong working lives will increase future output, enhancing incentives for corporate investment and reducing household savings already in the short-term, yielding a reduction in the current account surplus and positive (though small) demand spillovers to the rest of the euro area.[2] These reforms are discussed in more detail in the next section. A medium-term fiscal position closer to the MTO, particularly to finance more public investment or other growth-enhancing fiscal policies would also be helpful (see paragraph 17 below).



Source: 2015 EC Ageing Report.



Source: Destatis and IMF staff calculations.

13. **Risks to the baseline are to the downside.** Given the considerable monetary and fiscal stimulus in the pipeline, upside risk could arise from a stronger-than-expected response of the economy. Inflation could also reach the ECB inflation target faster should wage pressures intensify, which would also accelerate the projected external rebalancing. On the downside, several external and internal risks, which are made particularly salient by the deep trade linkages between Germany and other euro area countries, the U.K., and China (Figure 7), could derail the growth momentum (see Annex III):

[2] See "Macroeconomic Effects of Policies to Expand the Labor Supply in Germany", Selected Issues Paper.

- Growing eurosceptic sentiment could lead some European countries to renegotiate the terms of their membership to the European Union, or exit the Union altogether. Most immediately, an exit by the U.K. (Brexit) following the referendum on June 23, 2016, would lead to protracted negotiations on successor arrangements. The related uncertainty may lead to periods of financial volatility, heightened uncertainty, and discourage investment. The U.K. is Germany's third largest export destination, German banks' consolidated exposures to the U.K. amount to 12 percent of GDP, and Germany's largest bank has sizable London-based operations.

- A greater–than-expected slowdown in key advanced and emerging economies (in particular China) could spill over to commodity exporters further, roil global financial markets and reduce global growth. Germany might also act as a transmitter of such a shock to economies in its manufacturing supply chain, notably in Central and Eastern Europe.[3]

- Tighter or more volatile global financial conditions could lead to sharp asset price declines and a decompression of credit spreads. In Germany, such a scenario may give rise to financial turbulence and second round adverse spillovers because of a globally interconnected financial sector.[4] The still incomplete new framework for bank recovery and resolution may complicate the policy response.

14. **Should a large downside risk materialize in Germany and across other advanced economies, a fiscal expansion would be warranted**. Further monetary support from the ECB would also be in order in such a scenario. In Germany, if the output gap became significantly negative, invoking the escape clause under the fiscal rule would be appropriate. In the case of a moderate recession, the relatively large automatic stabilizers would help absorb adverse shocks.

Authorities' Views

15. **The authorities broadly agreed with staff's views on the outlook and the driving role of domestic demand at the current juncture.** They highlighted the continued strength of the labor market, but agreed that core inflation had been less dynamic than anticipated. This was attributed mostly to the decline in oil and other commodity prices that led to a slowdown in core inflation via indirect channels, as well as the effect of lower non-energy import prices. In contrast, the pass-through of wages to prices was quite low. Looking forward they projected somewhat more dynamic core inflation developments than staff, but they saw slight downside risks to this projection. They also noted the weak response of inflation to measures of economic slack in the past, and did not expect nominal wage growth to increase significantly from current levels. They also broadly agreed with staff on risks, expressing particular concern about the erosion of confidence in the European project across the continent.

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[3] See Staff Report for the 2015 Article IV Consultation, Box 1, for a quantitative scenario of an emerging market slowdown risk. On the German-Central European supply chain, see IMF Country Report No. 13/263.

[4] See FSSA for an analysis of financial sector outward and inward spillovers and the impact of higher interest rates on housing prices and the mortgage portfolio in the banking sector.

16. **As in the past, the authorities did not see the large current account surplus as a reflection of policy-related macroeconomic imbalances.** They noted the need for high household savings and fiscal discipline in light of long-run demographic developments. While the reasons behind high net savings by the non-financial corporate sector were less clear, especially since the long de-leveraging process following the stock market crash of the early 2000s should have been completed by now, they did not see this as the result of policy distortions but mainly pointed to the desire of German firms to take advantage of more attractive investment opportunities abroad. The Bundesbank saw the undervaluation of the REER as much smaller than staff (5–6 percent vis-à-vis 10–20 percent), the different assessments being due to different methodological and conceptual issues as well as observation periods. The large and growing NIIP was a concern to some counterparts, given past experience with poor financial investments abroad.

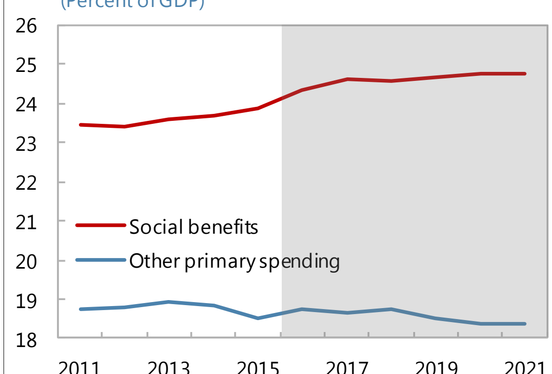
POLICY DISCUSSIONS

Progress has been slow on addressing needs in public infrastructure and stimulating competition in the services sector, while mounting aging costs and a successful labor market integration of women and refugees require further policy action.[5] *Germany's leadership at the European level and globally in the area of structural reforms would be enhanced if more progress was achieved on this front domestically.*

A. Public Investment: More Progress Needed

17. **Full use of the room available under the fiscal rules, including from possible revenue overperformance, to finance additional public investment and growth-friendly structural reforms would be appropriate.** Observance of the fiscal rules has served Germany well, and is important especially given the rise in social spending. Nevertheless, in light of the need to fund more public investment and other growth-enhancing fiscal policies (see below), as well as the benign DSA results, a looser fiscal position (closer to the MTO) than currently envisaged through 2016–21 would be appropriate. This would also modestly reduce the current account gap. The additional spending would result in a larger output gap, but this effect would be temporary and limited, because potential output would also increase as the growth effects of the initiatives are realized. In 2016–17, when the policy space is narrower (see Figure 4), priority should be given to public investment, while the other reforms that need fiscal resources could be financed through reallocation within the budget. To avoid continued overperformance in the future, an assessment of structural changes in macroeconomic variables

General Government Spending
(Percent of GDP)



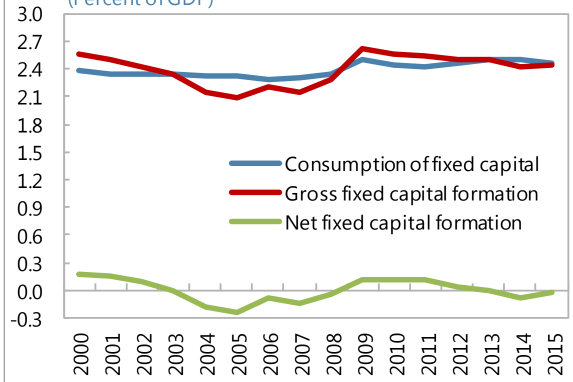
Sources: Federal Statistical Office, Ministry of Finance, and IMF staff calculations and projections.

[5] See Annex IV for a summary of the Authorities' response to the policy recommendations made in the 2015 Article IV Staff Report.

underlying revenue projections may be warranted, and forming contingency plans for the use of unexpected windfalls would be beneficial.

18. **A more ambitious public investment program is needed.** Based on expert studies, in 2014 staff called for an increase in public investment of 2 percent of GDP over four years concentrated mainly in transport infrastructure—noting also that this policy would give rise to meaningful positive demand spillovers to the rest of the euro area.[6] Since then, the authorities have undertaken to step up public investment by a cumulative 0.7 percent of GDP over 2016–18.[7] In 2015, gross public investment was up by 5.3 percent but net public investment remained negative. The newly-released 15-year plan for transportation infrastructure investment points to a sizable increase in investment over 2016–30 relative to the previous plan adopted in 2003 (from EUR 10 billion to EUR 17 billion per year). However, the plan is not binding and budget appropriations will be decided on a rolling basis. The public investment backlog should be addressed more vigorously already this year and next, particularly if revenue keeps overperforming. Reprioritizing within the budget envelope could also open space for more infrastructure investment in the coming years.

Public Gross and Net Fixed Capital Formation
(Percent of GDP)



Sources: Destatis and IMF staff calculations.

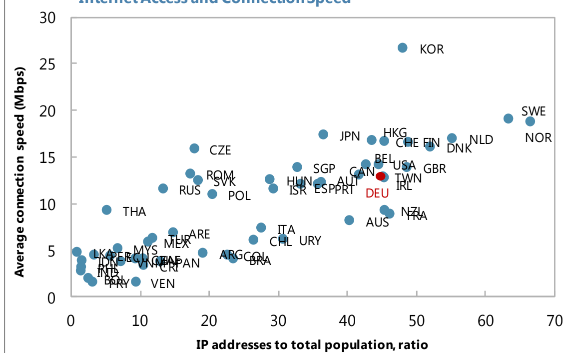
19. **Removing administrative and regulatory constraints to public investment by municipalities should be a high priority and recent steps in this direction are encouraging**. While gross public investment rose in nominal terms at the federal and regional level, it fell in municipalities, where the needs are highest. Out of a EUR 3.5 billion Municipal Investment Fund constituted by the federal government in mid-2015 to provide financial support to local governments, less than EUR ½ billion have been used so far. Infrastructure planning capacity is reported to be limited in some localities, while addressing the refugee surge has also drained administrative resources; strict regulation at the national and European level is an additional obstacle. To address the situation, and in line with past staff recommendations, the government is considering reforms to make Germany's PPP advisory agency *Partnership Deutschland* more effective for municipalities, including by changing its ownership structure from private to public and broadening its mandate to also cover infrastructure programs financed through normal procurement. Furthermore, the federal government is discussing with the Länder the creation of a federal transportation agency, which would be in charge of the planning, construction, and maintenance of federal highways and would be financed through user fees. The specialized agency

[6] For model simulations of the macroeconomic effects of public infrastructure investment in Germany, see "Germany: Selected Issues", IMF Country Report 14/217, Chapter III.

[7] This excludes planned increases for the Ministry of Defense (0.3 percent of GDP through 2020), which also include investment expenditures.

would help limit implementation delays and decouple transport infrastructure investment from the budgetary cycle.

20. **Recent initiatives to facilitate private investment in the digital infrastructure are welcome and could be strengthened further.** Recent data indicate that Germany is lagging behind most peers in terms of average internet connection speed and average peak connection speed. The government will provide grants totaling EUR 2.6 billion over 2016–18 to ensure fast broadband expansion in rural areas where a market-based expansion would be unprofitable. In parallel, the government auctioned frequency bands to mobile telecommunications providers in mid-2015. Complementary measures to promote venture capital (including in the context of the EC's Investment Plan for Europe) and e-procurement were recently taken. However, based on market research on medium-term bandwidth needs, the 2015 Expert Commission to Strengthen Investment in Germany argued that the government should be more ambitious in its strategy and promote a greater rollout of fiber cable now rather than later.



Sources: Akamai's State of the Internet 2015Q4 report and IMF staff calculations.

Authorities' Views

21. **The Ministry of Finance stressed its commitment to a balanced federal budget as important to preserving fiscal discipline, and highlighted capacity and regulatory constraints to further expand public investment.** The commitment to the "black zero" at the federal level was seen as an important cornerstone of a sound fiscal policy, especially in light of strong and growing pressures from aging-related spending. Also, it was noted that fiscal policy was already expansionary given that the German economy was in a situation of normal capacity utilization. On public investment, the Ministry of Finance considered the current level of public investment as adequate at the federal level. As to the local level, administrative backlogs and regulatory restrictions, including European ones, were highlighted. Reducing the overall burden on labor income through lower taxes and contributions, particularly for the low-to-medium income brackets, was seen as a useful measure to boost output. On digitization and investment in digital infrastructure, the Ministry of Economic Affairs highlighted its recently released new Digital Strategy 2025 as a possible framework for bolder, future initiatives, including the creation of a gigabit optical fiber network.

B. Boosting Labor Supply in an Aging Society

22. **The projected sharp decline of the working age population after 2020 calls for measures to boost labor supply and thereby mitigate the adverse effects of aging on potential output**. In recent years, immigration flows more than offset the natural decline in the working age population. In the medium-term, however, some of the relevant push factors behind immigration (the EU enlargement to the East, severe recessions in several other euro area countries,

conflicts close to the EU borders) may not persist.[8] In addition, the population is aging rapidly also in many countries of origin in Eastern and Southern Europe. As net immigration flows normalize over the medium-term, the working age population will resume shrinking and will do so at an increasing rate. This calls for measures to boost the labor supply along three main axes: successfully integrating the current wave of refugees into the labor market, incentivizing greater full-time female labor force participation, and extending working lives further. Some, though not all, of these reforms entail a small fiscal cost. If they were to be implemented in the short run, when the space available under the fiscal rules is limited and should be used primarily to increase investment, the cost could be financed by reprioritizing spending within the budget. In the medium run, on the other hand, there is space to accommodate these costs without breaching the fiscal rules.

Integrating the refugees and other immigrants into the labor market

23. **Germany's willingness to accept a large number of refugees has provided an important global public good, and the challenge going forward will be to integrate into the labor market the refugees who stay.** While the strong current labor market situation is supportive, in the past immigrants have faced sizable obstacles, resulting in significantly lower labor force participation, higher unemployment, and lower wages than native workers with similar characteristics.[9] These gaps narrow with the length of their presence in Germany, but never fully disappear. More recent cohorts and previous immigrants from the same countries of origin as the current wave of refugees typically had worse labor market outcomes than other immigrants.

24. **Though many measures have been taken and more are underway, further policy action should be considered to promote a successful labor market integration of refugees**. Remaining restrictions on work during asylum procedures could be further lowered (Box 3). In parallel, active labor market policies (such as temporary wage subsidies) that have proven successful in the past in other countries should be vigorously used; the temporary exemption from the minimum wage currently available to long-term unemployed could be extended to refugees, and the decision on how much to raise the minimum wage next year should take into account the challenge of integrating them. Lowering the effective taxation of labor income at the low end of the income scale may also help moving many refugees and other low-skill workers from social assistance to work. The cost of these policies is likely to be small, particularly when considering the associated savings from reduced use of social assistance.

25. **Policies should also ensure that refugees access higher-quality jobs and job training**. In this respect, the traditional, formal approach to job qualifications acquisition and recognition may not work well for refugees (or other immigrants), who are often older than typical trainees, may have skills learned informally, and may not be able to afford lengthy schooling periods with low earnings (the typical vocational training duration is three years). Initiatives to make informal skill recognition

[8] See "Emigration and its Economic Impact in Eastern Europe," forthcoming IMF Staff Discussion Note.

[9] See Beyer, R. (2016), "The Labor Market Performance of Immigrants in Germany", IMF WP 16/6, and Aiyar et al., "The Refugee Surge in Europe: Economic Challenges", SDN 16/02.

possible and design more flexible forms of vocational training, with language training and a stronger on-the-job component relative to standard formal schooling, should be given priority. While all these initiatives may require some additional fiscal outlays in the short-term, they would have a potentially large payoff down the road through better employment prospects and less reliance on social welfare. They may also help successfully absorb future non-refugee immigrants.

Incentivizing more active female labor force participation

26. **More active participation of women in the labor market would not only increase labor supply but also enhance productivity.**[10] While female labor force participation is relatively high in Germany, close to half of employed women work only part time. Thus, women work on average 30.5 hours per week, 9 hours less than men do. Limiting constraints to full-time work by women would boost labor supply. It would also strengthen incentives for on-the-job training provision and make firms more likely to have women in senior management positions, which can improve corporate profitability. To this end, the supply of full time schooling services should be expanded further. Distortions that increase the marginal tax burden for secondary earners should also be reduced, specifically by moving towards a system in which health insurance contributions depend on the number of household members covered, with targeted support for poorer households. Greater provision of childcare services and after-school programs would have the further benefit of facilitating the social integration of immigrant children. Also in this case, fiscal resources deployed now—about ¼ percent of GDP if, for example, Germany were to raise spending in this area to the OECD average—would have potentially important medium-term payoffs through higher potential GDP.

Extending working lives

27. **Germany's unfavorable demographic trends are weighing on the outlook.** A recent government report[11] estimates that age-related government spending is set to rise between 2 and 4½ percentage points of GDP by 2040 under current policies. Without further reforms, already-high social security contributions would have to rise further or already-declining replacement rates would have to fall further. Past reforms will push the statutory retirement age from the current 65 years to 67 years by 2030 (when pension outlays are expected to accelerate), but no further increases are foreseen, and some workers can still retire at the age of 63. Although participation rates in the 55–64 age group is high in Germany compared to other OECD countries, the opposite is true for those older than 64. While conditions to extend employment contracts beyond the statutory retirement age have been relaxed, there is a loss of pension wealth for those who remain employed.

[10] See Christiansen and others (2016), "Unlocking Female Employment Potential in Europe: Drivers and Benefits", IMF Departmental Paper, and "Women in the Labor Market and the Demographic Challenge", Selected Issues Paper for the 2015 Article IV Consultation.

[11] "Fourth Report on the Sustainability of Public Finances" (2016), German Federal Ministry of Finance.

28. **Extending working lives can bring the double dividend of increasing old-age incomes while improving the fiscal outlook.** To guard against the risk of steep declines in pension benefits or increases in contribution rates—whether mandatory or voluntary—in the long term, retirement ages could be indexed to life expectancy. Furthermore, the choice to remain in the labor force beyond the pensionable age could be made actuarially neutral, allowing individuals to optimize the timing of retirement. Both policies would aim at encouraging longer working lives on average, increasing retirement incomes, while also shoring up long-term government finances. A reform in this direction would result in permanently lower household savings and current account surplus, thus helping external rebalancing.

Outward spillovers

29. **Policies to boost labor supply would entail positive—though small—outward spillovers, notably to the euro area.**[12] The positive response would be commensurate to the domestic demand effect of each policy and determined by the importance of trade linkages. As all three policies permanently boost domestic consumption and investment, German imports would increase, particularly in the short-run, when domestic production has not fully adjusted yet but demand rises because future gains are anticipated. Short-term demand spillovers would be more pronounced if the fiscal costs entailed by some of the reforms are deficit-financed rather than budget-neutral. For the rest of the euro area, the short-term net trade spillover from either extended childcare provision or training of refugees is estimated at roughly 5 percent of the impact on Germany's real GDP. For the prospective increase in retirement ages, the spillover effect rises to 7.5–10 percent. Spillovers to other regions would also be positive but smaller. Joint implementation of these policies together with a stronger public investment effort would magnify the beneficial spillover effects.

Authorities' Views

30. **The authorities broadly agreed that the reforms proposed by staff would be beneficial.** On refugees, the authorities stressed the importance of qualification and training to prevent the newcomers from being trapped in low-skill and marginal employment. Initiatives to make informal skill recognition possible and design more flexible forms of vocational training are being considered but will take some time to develop. They also emphasized that the high professional standards typical of the German skilled craft sector should be safeguarded. Finally, they explained that no further exemptions to the minimum wage were being contemplated. The authorities agreed that broadening opportunities for women to work full time is a priority, and highlighted the ongoing effort to expand the provision of childcare, whereas changes in tax policies were seen as more politically difficult to implement. They welcomed staff's call for facilitating longer working lives to better provide for retirement income, but also saw promise in planned initiatives to strengthen second pillar (occupational) pensions—by broadening coverage to more categories of workers—as well as to encourage work beyond the statutory retirement age.

[12] See "Macroeconomic Effects of Policies to Expand the Labor Supply in Germany", Selected Issues Paper.

C. Stimulating Competition in the Services Sector

31. **Competition-enhancing reforms in the services sector should be pursued more vigorously.** Slow productivity growth in the services sector is holding back overall growth, and reforms to enhance competition in parts of the sector where it is lacking could trigger a shift toward greater efficiency and innovation.[13] However, progress on this front has been slow as special interest groups appear well organized, and has mainly reflected pressure from the European Commission (EC). In the context of the EC-driven mutual evaluation on access to and practice of regulated professions, the federal and state governments reviewed the extent and nature of professional regulations, and submitted an action plan in January, which the EC has recently qualified as lacking ambition. In the area of professional services, the loosening of a few requirements are contemplated. Ongoing infringement procedures by the EC are ongoing regarding the minimum compulsory tariffs of architects and engineers, while an agreement has recently been found with tax advisors to make these tariffs indicative instead of compulsory. In the retail sector, the government recently gave its green light to a merger proposal between two supermarket chains that had received a negative opinion by the competition authority and the monopolies commission, prompting the chairman of the latter to resign.

32. **Incumbents' dominant position in railways and postal services is still largely unchanged.** A new version of the long-awaited Act to Strengthen Competition in the Railway Sector was approved by the federal cabinet in January 2016 but is facing a deluge of amendments in the parliamentary process. If passed, it would strengthen the powers of the regulator, and would enhance incentives to boost efficiency, while improving the conditions for the development of a single European railway market. Meanwhile, the market share of new entrants in the long-distance rail passenger market segment has remained below 1 percent. In the area of postal services, the competition authority accused the incumbent operator of abusing its dominant position, while the monopolies commission called last year for a reform of the legal and regulatory framework so as to address impediments to effective competition, to no avail.

Authorities' Views

33. **The authorities agreed that faster progress in reforming regulation in parts of the services sector would stimulate competition and growth, but argued that the political process was extremely difficult**. In the area of professional services, they saw scope to review conduct regulation, including price regulation, restrictions on inter-professional cooperation, exclusive rights, and shareholding restrictions. By contrast, they thought entry regulation to be truly instrumental in promoting consumer protection and quality and unlikely to have adverse economic effects. They saw the digitization of the economy as an opportunity to rethink and, if necessary, redesign rules and regulations in order to foster innovation and the transformation of existing markets, while

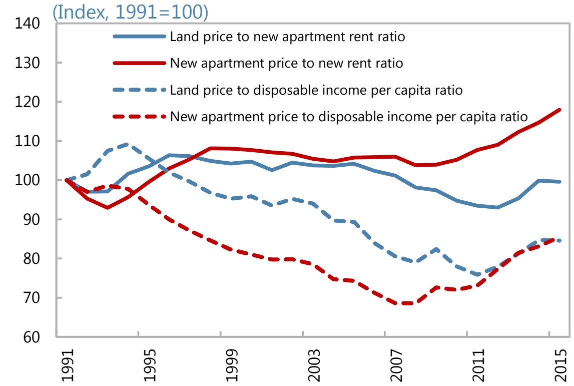
[13] For model simulations of the macroeconomic effects of services sector reforms in Germany and related spillovers, see "Germany: Selected Issues", IMF Country Report 14/217, Chapter III.

transferring valuable protection standards into the digital economy. They argued that the proposed railway regulation would have a positive impact on the competition on the railway sector, and noted that the market share of the incumbent in regional passenger rail transport and rail freight transport continued to decline, and that the liberalization of long-distance bus services in 2013 had a strong stimulative effect on the long-distance passenger market. On the merger between the supermarket chains they explained that the Minister of Economic Affairs granted a ministerial authorization with conditions, since common "welfare considerations" prevailed over competition concerns in that particular case.

D. Housing: Relieving Price Pressures by Stimulating Supply

34. **Housing prices in the most dynamic cities deserve close monitoring, but concerns about across-the-board excesses in the mortgage market look premature.** In recent years, the upward price trend has been largely driven by fundamental factors such as demographic developments, rising incomes, ratcheting up construction costs, and lower mortgage rates. As households have taken advantage of record-low interest rates, mortgage credit growth has been trending up, but at a still relatively moderate pace and with largely unchanged credit standards. When measured in relation to rents or income, current average housing prices are broadly consistent with long-term averages, suggesting the upswing mainly reflects catching-up effects. There are, however, important regional differences. Apartment price inflation rates have recently reached double-digit in some of the largest cities and in some university towns where pockets of vulnerability (high loan-to-value and debt-service-to-income ratios) have recently emerged. Available data (e.g., transaction volumes, rates of return) for commercial real estate also indicate that the market is dynamic, but credit growth in this sector is still moderate and in line with that in the residential real estate sector.

Housing Market Valuation Indices
(Index, 1991=100)



Sources: Bulwiengesa, Destatis, and IMF staff calculations.

35. **Housing price inflation also reflects a tepid response of housing supply to a swell in demand.** Even before the refugee surge, net immigration turned out much higher than projected in the most optimistic migration scenario of the 2009 official demographic projections, expanding the demand for housing (Figure 8). Housing completions and residential building permits have rebounded from their 2009 trough, but the new residential construction has remained far below the amount required to balance the market according to various consultancies and the Federal Ministry for the Environment. Staff analysis indicates that the long-term housing supply price elasticity has nearly halved over the past four years, suggesting that, absent new policy action, balancing supply and demand in the housing market could take a long time and would involve further significant

price increases in the short term.[14] Furthermore, the mismatch between supply and demand appears to be concentrated in the affordable housing segment.

36. **To address supply constraints and increase the availability of affordable housing, the government has developed a comprehensive package of measures**. This package includes the sale of publicly-owned land and properties below market price for affordable housing projects, more funds for social housing, and targeted tax incentives. It complements the near doubling in the budget for housing subsidies (*Wohngeld*) from the beginning of 2016, as well as policy measures taken earlier to accommodate refugees. The effectiveness of this package should be closely monitored, and the authorities should stand ready to recalibrate it if the desired effects on supply do not materialize. In addition, loosening height and zoning restrictions in areas under pressure and their vicinity seems to be needed.

37. **To further strengthen the housing supply response, lowering the effective real estate transfer tax rate on new construction would be helpful**. The Länder have been free to set the real estate transaction tax rate since 2007. Since then, rates have increased from 3.5 percent in 2006 to up to 6.5 percent now. In addition, land may be taxed multiple times before new construction is completed, which creates distortions and increases the effective tax rate. The authorities could consider a VAT-like system for land transfer taxation in the case of new construction so as to avoid double taxation of land and make new construction more financially attractive. To further improve the efficiency of real estate taxation, they could also tax properties more heavily than transactions; in fact, an update of property value assessments is long overdue.

38. **Legislation to expand the macroprudential toolkit to address potential imbalances in the housing market and related data gaps is being prepared**. Macroprudential policy instruments (countercyclical capital buffer, capital buffers for systemically important institutions, a systemic risk buffer, and phased-in liquidity coverage ratio requirement) have become operational on January 1, 2016. In June 2015, the Financial Stability Committee recommended additional macroprudential tools (loan-to-value caps, debt-service-to-income limits, debt-to-income ceilings and minimum amortization requirements) specifically targeted at the real estate sector, and the legislation is being drafted. However, the calibration and operationalization of these instruments requires granular and frequently updated loan-level data on household income and indebtedness, as well as data on banks' individual exposures to mortgage risks, which are currently not available to supervisors, in part because of strict data protection laws. The new legislation would need to address these data gaps.

[14] See "The Price Responsiveness of German Residential Investment," Selected Issues Paper.

Authorities' Views

39. **The authorities concurred with staff that a housing bubble was not an immediate concern.** Based on its internal valuation models, the Bundesbank's did not see recent price increases or mortgage credit developments as alarming, but was closely monitoring the situation. Authorities agreed with the importance of broadening the macroprudential toolkit, but pointed that privacy concerns related to data access were complicating the legislative process. There was broad agreement that housing supply needed to catch up with demand. The authorities noted that their action plan in this regard was fulfilling one of the commitments made in the government coalition agreement. They also explained that some measures had already been enacted, and that the action plan's success would hinge on continued cooperation across all levels of government as housing policy is very decentralized.

E. Banking and Insurance: Managing Many Transitions

40. **Low interest rates may be a persistent feature of the global economy looking forward.** Monetary policy is not the only factor pushing interest rates down in Germany and globally. Despite record low interest rates since the global financial crisis, inflation has remained subdued, a sign that the natural (or equilibrium) real interest rate—the rate that ensures low inflation at normal capacity utilization—has dropped to levels well below those prevailing in the past. An aging population and slower productivity growth are key factors explaining the secular downward trend in real interest rates since the 1980s (see Box 4). If such factors persist, then nominal and real interest rates may remain below their pre-crisis levels even after inflation returns to target and monetary policy normalizes, with important implications for the financial sector.

41. **Multiple challenges require the banking sector to accelerate restructuring to shore up profitability and safeguard internal capital-generating capacity.** Risk-based bank solvency indicators have improved since the 2014 SSM's comprehensive assessment and seem comfortable, but leverage ratios are low in international comparison. Low profitability reflects a bank-specific combination of remaining crisis legacy problems (especially for banks exposed to the shipping industry), provisions for compliance violations (in the two largest banks), the need to adjust business models to the post-crisis regulatory environment (in all large banks), as well as low interest margins and high operating costs (especially in retail banking). These challenges may have contributed to make large German private banks more sensitive to market turbulence earlier this year relative to peers, with uncertainties on the quality of Tier 2 capital a likely amplifying factor. For large banks, implementing ongoing restructuring plans that involve across-the-board cost-cutting, refocusing on core activities and withdrawing from non-profitable and capital intensive activities and locations, and improving IT systems are priorities. Smaller banks should pursue efforts to further reduce costs, accelerate the development of digital banking solutions, and increase fee-based activities to offset shrinking interest rate margins. Given abundant lending capacity in the sector, meeting these challenges is not expected to lead to a meaningful reduction in the availability of credit to the economy.

42. **Adjustments in banks' strategies, partly in response to regulatory changes, may entail negative spillovers to the rest of the world, as major German banks are withdrawing from correspondent relationships in a number of countries.** In a context of tighter capital and liquidity requirements, stronger AML/CFT and tax transparency rules, as well as economic and trade sanctions in some countries, German global banks have been reviewing their customer base and business lines and have terminated accounts with certain customers and locations, though the phenomenon remains difficult to quantify. To prevent excessive curtailment of financial activities and important growth disruptions in emerging and developing countries, the authorities should encourage the relevant German banks to better manage the risks around these relationships. They should also strengthen the dialogue and cooperation among national supervisors, including to harmonize regulatory frameworks and facilitate cross-border information sharing on customer due diligence.

43. **The FSAP conducted a full assessment of Basel Core Principles for Effective Banking Supervision (BCP) and concluded that the regulatory and supervisory structure was sound, albeit with some gaps.** The assessment was based on a new international methodology, which emphasized corporate governance and generally raised the bar for both banks and supervisors. The assessment founds that the establishment of the SSM had a positive impact on supervision, which moved from a qualitative to a more quantitative approach. However, important shortcomings were highlighted, among which the need to strengthen the role of bank supervisory boards, to provide guidance on supervisory expectations for compliance with risk management and other supervisory requirements, and to improve the coverage and granularity of supervisory data. In particular, the lack of comprehensive, consistent and granular data affects all aspects of financial supervision, risk monitoring, and macroprudential policy. A rapid solution to this problem is essential, and a first step in this direction would be to amend the Federal Data Protection Law, to allow judicious use of data already produced for other purposes, while maintaining adequate privacy protection.

44. **Completing the agenda on the new bank recovery and resolution framework should be a high priority as Germany is home to highly interconnected systemic institutions.** The new architecture is complex and still in its infancy. The Single Resolution Mechanism (SRM) became operational at the beginning of the year. The Bank Resolution and Recovery Directive (BRRD) was transposed into German law, while in January 2016 the Single Resolution Board (SRB) assumed direct responsibility for resolution planning and implementation (in conjunction with the European Commission) for (the largest) banks directly supervised by the ECB. However, resolution planning is still work in progress as manuals and instructions for the use of resolution tools are still being drafted by the SRB. In addition, the FSAP highlighted that the decision-making process for recovery and resolution is extremely complex as it involves several layers of domestic and European institutions whose ability to coordinate in crisis time remains to be tested. Moreover, the arrangements for handling a potential system-wide crisis remain unclear, in particular when it comes to the coordination between the SRB, the ECB and the German Ministry of Finance. Given the large size of the banking sector relative to the economy and the strong interconnectedness of the system, the authorities should accelerate contingency planning, including by testing the plans via real

simulation exercises with all concerned parties. Given that Germany is home to one of the largest G-SIB, this work should be given the highest priority.

45. **Supervisors need to closely monitor the life insurance sector, demand action plans from firms in difficulty, and keep safety net arrangements under review**. Low interest rates, if protracted, will erode life insurers' ability to meet guaranteed commitments. The transition to Solvency II (which began in January 2016) will make the difficulties more evident, as the new regulatory framework requires marked-to-market valuations and a forward-looking assessment of solvency. Search for yield behaviors—longer duration and riskier assets—have been recently emerging, which is adding to life insurers' challenge to meet Solvency II as correspondingly higher capital buffers are required. To help life insurers adjust to the new regime, European Directives allow a 16 years transition. However, starting in 2017 life insurers will be forced to acknowledge the impact of transitional measures on their results—a clear communication challenge with the risk of severe negative reactions by investors. The FSAP analysis indicates that without transitional measures a significant share of life insurers would not be able to meet regulatory requirements in the baseline scenario. Medium-sized companies are the most affected as they largely rely on guaranteed return products as source of income and do not benefit from the same amount of (international) diversification as larger companies. Thus, supervisors should demand action plans from firms in difficulty and keep safety net arrangements under review.

Authorities' Views

46. **The authorities shared staff's view that the banking sector needed to accelerate its restructuring**. However, they stressed that small retail banks had sizable capital buffers hence time to adjust to the low interest rate environment. They also recognized that for life insurers the transition to the new regulatory framework was made more challenging by the necessity to meet guaranteed return commitments in a low interest rate environment, but expressed confidence in a smooth adjustment. On supervision, they agreed that efforts to bridge existing data gaps, in particular for mortgages, had to be stepped up, but argued that the main hurdle was political and grounded in Germany's restrictive data protection laws. The authorities also expressed strong commitment to the new EU bank resolution framework and the concept of bail-in, and shared staff's concerns about the challenge to ensure operational readiness to implement the framework, both at the European and German level.

STAFF APPRAISAL

47. **Germany will remain on a moderate growth path in 2016 as strong domestic demand is offsetting weak foreign demand.** A fiscal expansion, further ECB monetary stimulus, and the continued effect of lower energy prices should more than compensate for lower demand growth from key advanced and emerging countries. Private consumption should continue to be dynamic as a strong labor market boosts real disposable income, while residential investment should respond faster than in the recent past to surging housing demand. Core and headline inflation are expected to get close to 2 percent only in the medium-term as labor cost increases slowly pass through to

prices. Risks are tilted to the downside. Although the monetary and fiscal stimulus in the pipeline could yield a positive growth surprise, a further slowdown in external demand, an erosion of confidence in the European project in parts of Europe, and a rekindling of stress in euro area sovereign bond markets could derail economic activity.

48. **The current account surplus is projected to stay near record levels this year, and the external position remains substantially stronger than implied by medium-term fundamentals and desirable policy settings.** Even though the growth contribution from net exports is expected to turn negative, favorable terms of trade effects will prevent the surplus from falling more rapidly. The persistent current account surplus reflects a combination of high savings and limited domestic investment partly due to modest medium term growth prospects. Owing to a persistently sizable surplus over the medium-term, the net international investment position will continue to grow rapidly, reaching almost 90 percent of GDP by 2020.

49. **Using of the available room under the fiscal rules to finance public investment and growth-friendly fiscal policies is appropriate to lift long-term growth, while also helping narrow the current account surplus.** The fiscal expansion planned for this year comes at an opportune time, as it will offset weakening external demand. In the medium run, the budget balance is expected to return to a surplus, with the public debt ratio falling below 60 percent of GDP by 2020. Fiscal resources available within the envelope defined by the fiscal rules, including in case of overperformance, should be used to finance additional public investments and growth-enhancing structural reforms. Stronger medium-term growth prospects would help revive domestic investment and reduce the need for saving, supporting the external rebalancing process and generating positive (though modest) outward spillovers, particularly to the rest of the euro area.

50. **A stronger effort is needed to efficiently address public infrastructure needs, which will also require tackling administrative constraints.** As public investment was low for many years, particularly at the municipal level, the capacity for planning and execution of new projects has suffered, which, together with more cumbersome regulatory requirements, is holding back a more vigorous investment effort. We urge the authorities to rapidly remove these bottlenecks. In this regard, the planned reform and expansion of the *Partnerschaften Deutschland* agency will be helpful. The creation of a federal transportation agency, financed through user fees, would also be important for a more efficient maintenance and upgrading of the federal roads system. Recent initiatives to stimulate private investment in fast broadband infrastructure, an area where Germany lags behind many peers, as well as complementary measures to foster venture capital and e-procurement, are welcome and should be reinforced.

51. **The projected decline in the labor force due to rapid aging after 2020 calls for measures to boost labor supply in the medium term**. Additional policies to integrate the current wave of refugees into the labor market, to broaden opportunities for full-time employment of women, and to extend working lives, would be important in this regard. These reforms would not only counter the projected growth decline in the medium term but also stimulate private consumption and investment in the short term.

52. **By hosting a large number of refugees Germany is helping address a global humanitarian emergency, and policy actions are recommended to promote a successful labor market integration of the refugees who remain in Germany.** The government has helpfully removed a number of restrictions to access to employment and training for asylum-seekers and persons with a temporary suspension of deportation. Policy measures to allow recognition of informally acquired skills and facilitate more flexible forms of vocational training, with a strong on-the-job component and intensive language teaching, should be strengthened. In parallel, active labor market policies (such as temporary wage subsidies) that have proven successful in the past in other countries should be further enhanced. Lastly, the decision on how much to raise the minimum wage next year should take into account the challenge of integrating the refugees. Marginal tax wedges should be lowered to incentivize greater labor supply by refugees and low-earning workers more broadly.

53. **To further boost female labor supply, enhanced childcare and after-school programs should complement a reduction in the marginal tax burden on secondary earners**. While female labor force participation is relatively high in Germany, almost half of employed women work only part time. Closing this gap would stimulate labor supply and employers' provision of on-the-job training, yielding productivity gains over time. Financial support for the expansion of childcare provision has increased over the recent years, and should be used to improve availability of high-quality full-time programs. Incentives to increase hours worked would also be raised by moving towards a system in which health insurance contributions depend on the number of adult household members covered, with targeted support for lower income households.

54. **Pension reforms to promote longer working lives can bring the double dividend of increasing employment while reducing old-age poverty.** As the old age dependency ratio is expected to rise, pressures on public finances will intensify. Existing automatic adjustment mechanisms to ensure the sustainability of the public pension system will give rise to sustained increases in contribution rates (pushing up the already high tax burden on labor) and declines in pension benefits (reducing old-age incomes). By extending working lives, a more adequate level of old-age income can be maintained, without a further rise in pre-retirement savings. To this end, indexing the retirement age to life expectancy and making the choice to remain in the labor force actuarially neutral would be helpful.

55. **Competition-enhancing reforms in the services sector should be pursued much more vigorously.** Progress on this front has been particularly slow, and is badly needed in light of low productivity growth. Infringement procedures by the European Commission regarding the minimum compulsory tariffs of architects and engineers have not been followed by any action yet. The long-awaited Act to Strengthen Competition in the Railway Sector has been under discussion for over three years. Meanwhile, the market share of new entrants in the long-distance rail passenger market segment has remained below 1 percent. Competition in postal services is still hindered by the ultra-dominant position of the domestic incumbent.

56. **Even though price dynamics in hot spots deserve close monitoring, concerns about across-the-board excesses in the mortgage market look premature.** In recent years, the upward price trend has been largely driven by fundamental factors such as demographic developments, rising incomes, ratcheting up construction costs, and the greater relative attractiveness of the largest cities where the supply response has been particularly sluggish, as well as lower mortgage rates. Mortgage credit growth has also been trending up, but at a moderate pace with largely unchanged credit standards overall. To be ready to address potential imbalances, granular and timely data on a loan-to-loan basis should be collected, and the legal basis for macroprudential tools specifically targeted at the real estate sector should be established rapidly.

57. **The government's policy package to help housing supply adjust to higher demand in the affordable segment is welcome.** The main constraint to a greater housing supply response in areas under pressure is the availability of building land. A particular focus on increasing the availability of publicly-owned land as well as on loosening height and zoning restrictions in those areas and their vicinity is thus needed. The implementation speed and effectiveness of the package, which requires close cooperation between all levels of government, should be closely monitored. The authorities should stand ready to reinforce the measures if the desired effects on supply do not materialize. In parallel, the efficiency of real estate taxation could be improved by a combination of increasing property tax (through a long overdue update of property values) and reducing the real estate transfer tax rate. The latter measure would have the additional benefit of further incentivizing new construction.

58. **The banking sector needs to adjust to several challenges, including a prolonged period of low interest rates.** In addition to low interest rates, low profitability reflects various combinations of persistent crisis legacy issues, provisions for compliance violations, the need to adjust business models to the post-crisis regulatory environment and technological change, as well as long-standing structural inefficiencies. While restructuring efforts at large banks still need to bear fruits and cost-cutting remains slow, fee-based activities are picking up in the smaller banks—an encouraging sign. Risk-based solvency measures indicate substantial capital buffers on aggregate, and non-performing loans are generally low and declining. However, some institutions remain highly leveraged.

59. **Low interest rates, if protracted, will erode life insurers' ability to meet guaranteed commitments in the future.** Supervisors need to closely monitor the sector, demand action plans from firms in difficulty, and keep safety net arrangements under review. Long transitional measures are allowed under the new EU Solvency II framework, and many life insurers are expected to rely on such measures—in particular those with a higher share of traditional products, lower trend profitability, and lower unrealized gains on the asset side. Authorities have appropriately re-focused their supervisory priorities on these firms. They should prepare a communication plan in coordination with the industry ahead of the publication of the new solvency measures in 2017, to explain the effect of the transition to Solvency II to various stakeholders.

60. **The Germany FSAP analysis indicates that the Single Supervisory Mechanism and Single Resolution Mechanism have had a positive impact.** Nonetheless, further enhancements in several areas should be high on the agenda of all the relevant authorities at the national and European level. First, the lack of comprehensive and granular supervisory data negatively affects all aspects of financial supervision and risk monitoring. Second, as the supervisory landscape evolves, supervisors need to communicate their expectations to banks—including on strengthening the oversight role of supervisory boards, internal control and audit, related party exposures, and operational risk—and develop guidelines and regulations that can be used to substantiate enforceable measures. Third, resolution planning for large banks with cross-border operations should be rapidly completed. Fourth, clarifying the necessary coordination arrangements involving the European and domestic authorities to handle a systemic crisis should be a key priority.

61. **Large global banks are withdrawing from correspondent relationships in a number of countries.** To prevent excessive curtailment of financial activities with emerging and developing economies, the authorities should encourage the relevant German banks to better manage the risks around these activities. They should also strengthen the dialogue and cooperation among national supervisors, including to harmonize regulatory frameworks and facilitate cross-border information sharing on customer due diligence.

62. It is recommended that the next Article IV consultation take place on the regular 12-month cycle.

Box 1. The Impact of Minimum Wage: Early Evidence

The new federal statutory minimum wage (MW) of €8.50 per hour became effective on January 1, 2015. In contrast to many advanced economies, Germany did not have a nationwide MW before, but only MWs established through collective bargaining agreements in some sectors. The new MW includes some exemptions (mainly regarding apprentices, interns, long-term unemployed, and youth), but no sectoral or regional differentiation. Accounting for these exemptions, the Federal Statistical Office reported that 4.0 million low-paid jobs (10.7% of total jobs) would have been covered by the MW as of January 1, 2015. However, because of phase-in provisions exempting sectors with a minimum wage below €8.50, only 3.3 million workers were affected by the MW at its inception.

No significant aggregate effect of the MW on the labor market can be detected in its first year of existence. Aggregate wage data show that, in spite of an acceleration in the second quarter of 2015, gross hourly wages actually decelerated somewhat compared to 2014 for the year as a whole. In parallel, the unemployment rate continued to decline.

To gain a better understanding of the effects of the MW, staff compared the evolution of wages and employment across sectors. The effects would be expected to be more visible in sectors with low average wages, as the MW would have been binding for a larger proportion of workers in those sectors. Focusing on differential effects across sectors at the same time allows to implicitly control for factors that may have changed aggregate labor market trends at the same time as the introduction of the MW. The comparison is carried out only among sectors with ex-ante gross earnings per hour below the median (€22.0) at the end of 2014, as the MW likely had minimal effects on sectors paying higher wages. For these sectors, the difference in the y-o-y growth of gross hourly earnings and employment between 2015:Q4 and 2014:Q4 is calculated. The hypothesis is that after the MW was introduced lower-wage sectors experienced stronger wage growth and weaker employment growth than higher-wage sectors.

Wage growth was slightly higher in sectors where the incidence of the minimum wage was stronger, but there was no difference in employment growth. The charts show a slightly negative correlation between wage growth and wage level for low-paying sectors. However, there is no evidence that lower-wage sectors experienced a stronger slowdown in employment growth than higher wage sectors. If one just focuses on sectors with earnings at the bottom-end of the distribution, these sectors do not seem to show a clear differential effect either in term of employment or in terms of wage growth.

Marginal employment (the so-called mini-jobs) appears to have been reduced by the MW. Mini-jobs pay less than €450 per month and are exempted from the employee's portion of social security contributions. Many mini-jobs were paid below the MW and the data show that their number declined substantially after the MW was introduced. The conversion of marginal employment into regular employment was one of the objectives of the MW law.

In summary, the MW seems to have had little or no effect on aggregate wages and employment so far, but a sizable downward effect on marginal employment. The lack of an adverse effect on total employment and the substitution of marginal with regular employment have also been identified by studies using micro data (Garloff, 2016; Amliger, Bispinck, and Schulten, 2016). The latter study also finds that after the introduction of the MW wages increased disproportionately in East Germany, for marginal part-time workers, and for women.

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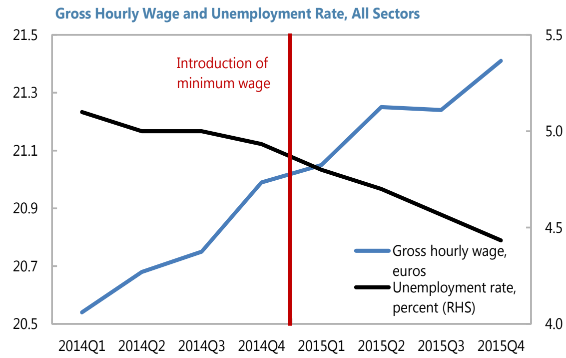
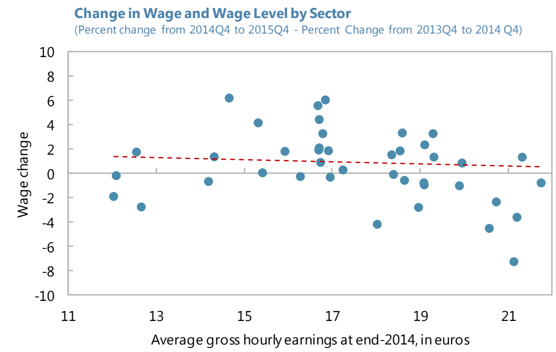
Box 1. The Impact of Minimum Wage: Early Evidence (concluded)

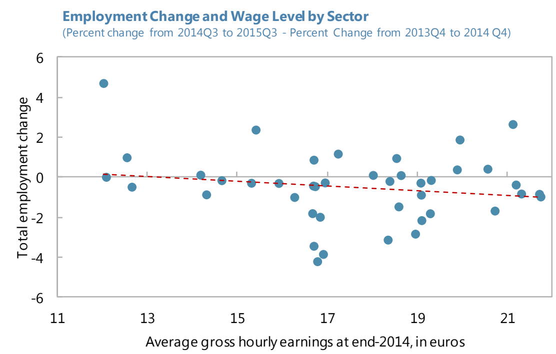
Gross Hourly Wage and Unemployment Rate, All Sectors



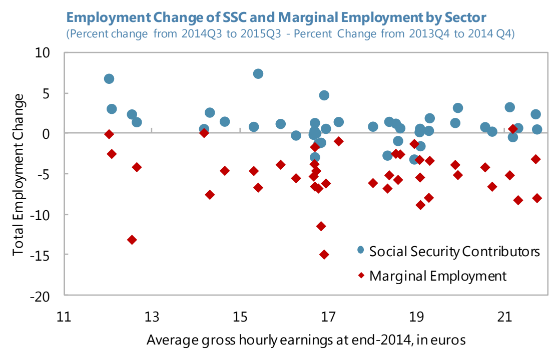
Change in Wage Growth by Sector



Employment Change and Wage Level By Sector



Employment Change in Regular and Marginal Employment Sector

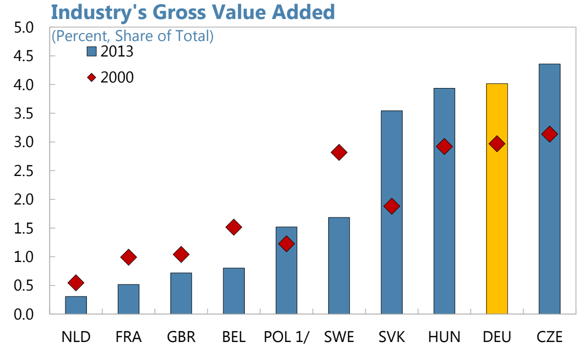


Sources: Destatis and IMF staff calculations.

Box 2. The German Automotive Industry: Structural and Cyclical Strengths

The share of the automotive industry (AI)[1] in the German economy is about 4 percent and it has kept growing over the past fifteen years. This increased sectoral specialization in the auto sector is mirrored by developments in Central European countries, where German auto manufacturers also have large operations, and stands in contrast with the reduced importance of the sector in other European countries. Real gross value added (GVA) between 2000 and 2013 has grown by 3.6 percent per year on average, over three times the rate of the rest of the manufacturing sector and the rest of the economy. Over the same period, productivity in the sector also grew rapidly (4.1 percent per year), in contrast with the lackluster performance in the rest of manufacturing and in the non-manufacturing sector.

Selected European Economies: Automotive Industry's Gross Value Added



Sources: Eurostat, Haver Analytics, and IMF staff calculations.
1/ Data for Poland is for 2003, not 2000.

The AI accounts for a sizable share of investment, volatility, and the non-energy goods trade surplus. Investment in the AI accounted for 5.7 percent of aggregate investment in 2013, and for 27 percent of aggregate GVA volatility measured on an annual basis during 1991–2013. It represented 19 percent of Germany's goods exports, and over 40 percent of the non-energy goods trade surplus in 2015. The share of the AI trade surplus in the total non-energy goods trade surplus has consistently been above 40 percent since 2008. The share of value added in AI exports has declined gradually over time as the AI's supply chain became more international, but still represented 68 percent in 2011, the last year for which data are available.

These structural strengths can be attributed to a number of factors, including a closed value chain, an excellent research basis, and very substantial investments in R&D. Germany has a closed value chain, from the steel industry to suppliers, and to auto manufacturers. All levels of the value chain cooperate closely in the development of new products and new technologies. The AI also benefits from a highly competitive domestic machinery construction industry. Non-university applied research think-tanks are part of well-organized automotive clusters in several German regions. Finally, the AI is Germany's R&D leader, representing about 40 percent of total German industry R&D spending in 2014, and one-third of total global R&D spending in the automotive sector.

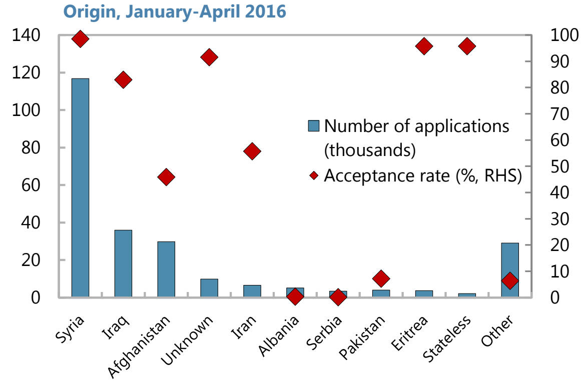
The recent fall in oil prices is providing a boost to Germany's AI exports. As cheaper gasoline lowers the cost of operating cars, it stimulates global demand for automobiles. A vector autoregression analysis for the period 2000–15 indicates that real German AI exports decrease with real oil prices. The peak effect of the response occurs after about 2 years and is about one fourth the size of the oil price shock. This suggests that, to the extent the fall in oil prices since mid-2014 is at least partly supply driven, the stimulus to the AI will run for several more quarters and will help offset the current weakness in external demand.

Volkswagen (VW) diesel issues seem to have had very limited effects on the AI so far. VW, at the core of a complex global supply chain, is the world's second largest carmaker. It employed 610,000 staff worldwide at end-2015, 46 percent of them in Germany. Last September, VW admitted to deploying software to evade emissions standards on 11 million cars worldwide. The company faces penalties, legal costs, and reputational damage. While financial markets' initial reaction was strong, the company's stock price stabilized quickly, and negative spillovers on the rest of the domestic industry appear to have been insignificant so far. However, heightened concerns about the emissions level of diesel cars, of which the AI is a world champion, and disruptive technologies (electric cars, driverless cars) are obvious challenges the AI will have to keep confronting to maintain its very strong position in the global market.

[1] The AI is defined as the Motor Vehicles, and Motor Vehicle Parts sector.

Box 3. The Refugee Surge and Labor Market Integration

Asylum Applications and Acceptance Rate by Country of Origin, January-April 2016



Source: Federal Office for Migration and Refugees and IMF staff calculations.

As conflicts in the Middle East deepened, between 750,000 and 1.1 million asylum-seekers entered Germany in 2015, about five times as many as in 2014 and the highest inflow since the end of World War II. Because of lags between the time of arrival, asylum application, and asylum decision, 475,000 asylum applications were filed in 2015, and 283,000 asylum decisions were made, with an acceptance rate of about 50 percent. Several measures to step up registration and processing capacity have been put in place in recent months, including a large-scale staffing increase in the Federal Office for Migration and Refugees. The list of "safe countries of origin" was also expanded to concentrate processing resources on the most at-risk asylum seekers. With the effective closure of the so-called Balkan route and the EU-Turkey agreement in early 2016, inflows decreased markedly, from over 200,000 in November 2015 to 16,000 in April 2016.

Once they have received asylum, refugees have the same rights to work, access vocational training, and receive job search assistance as local workers. However, in practice they remain at a considerable disadvantage relative to local workers, as they lack language knowledge, relevant skills, and job search networks. Some elements of the current labor regulation framework are supportive: to help the job placement of the long-term unemployed, there is a six-month exemption from the statutory minimum wage; the employment agency can also grant the employer a temporary wage subsidy—a policy that has proven effective for the labor market integration of immigrants in other countries.[1] However, while the asylum application is pending, or if the application is rejected but the individual is granted "tolerated" status, access to the labor market, training, and job search assistance is more limited. In response to the refugee surge, the authorities have taken a number of policy measures to ease these restrictions at an early stage, as well as to broaden the refugees' access to language and vocational training. Integration courses (mostly language training) and active employment services have been opened to asylum seekers and persons with temporary suspension of deportation with good prospects of being accepted. Access to vocational training, internships, and related financial support has also been simplified and widened. A ban on temporary agency employment has been partially lifted, and the processing capacity of the office in charge of recognizing foreign educational qualifications has been stepped up. The private sector has also launched a number of initiatives.

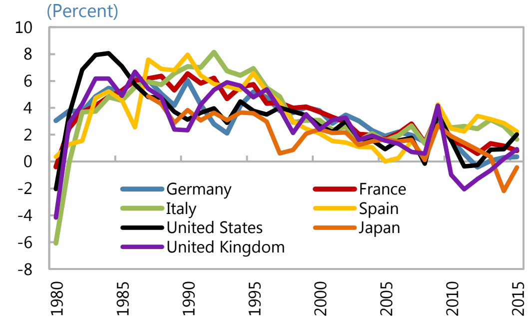
A new law under discussion would temporarily relax the so-called "labor market test" (the obligation for the employer to prove that the job could not have been taken by a EU national) in areas with low unemployment, allow individuals with tolerated status to work for two years after completing vocational training, and create 100,000 low-paid jobs in the public sector in positions that would not compete with private sector employment as a way for asylum-seekers to remain active and top up their earnings while the asylum process in under way. The law would also impose restrictions on the geographical mobility of refugees who rely on social assistance to ensure an equitable distribution of the financial burden across regions.

[1] Aiyar et al., "The Refugee Surge in Europe: Economic Challenges," IMF Staff Discussion Note, 16/02.

Box 4. Low Interest Rate Environment: Monetary Policy or Long-Term Factors?

Real interest rates in Germany and globally have been declining steadily since the 1980s. While in the public debate the monetary policy response to the Great Recession is often seen as the primary cause of low interest rates, the data show that real interest rates have been trending downward for a long time in advanced countries, including in Germany. This trend has persisted through various cycles of monetary policy loosening and tightening, suggesting structural causes.

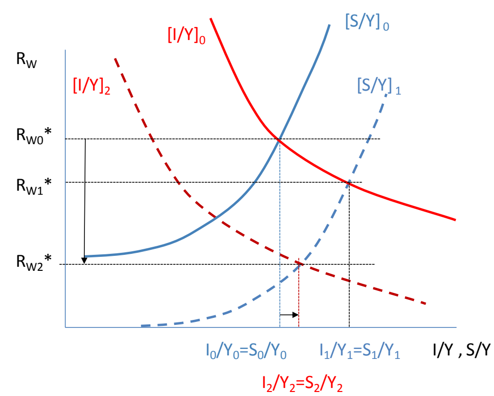
Real 10Y Bond Rates
(Percent)



Source: IMF World Economic Outlook.

The literature has highlighted a number of global structural changes that have likely affected both the supply of savings and the investment demand. As life expectancy rises faster than the average retirement age, households have to save more to provide for longer retirement years (Gottfries and Teulings, 2015). Rising income inequality in a number of countries may also have amplified the phenomenon, as rich households tend to save a larger part of their income (Dynan et al, 2004; Cynamon and Fazzari, 2014; Piketty and Saez, 2014). At the same time, globalization has brought an increasing number of economies closer to the technological frontier, reducing the need for further fast capital building in catching-up countries (Natal and Stoffels, 2007). The decline in TFP growth in advanced countries may also have reduced the global demand for investment funds (Laubach and Williams, 2003; Gordon, 2015), and this process may have been accentuated by the secular decline in the relative price of investment goods (IMF, 2014). All factors that decrease global investment demand (an inward shift of the red I/Y curve) or increase the global supply of savings (an outward shift of the blue S/Y curve) lead to a decline in the equilibrium real rate of interest (R_w), the price that clears the global market for the desired demand for funds and supply of funds. These considerations imply that monetary policy is only partially responsible for the current low interest rate environment. Furthermore, real interest rates may not rise appreciably if and when monetary policy is tightened, unless other, structural factors change as well. In Germany and globally, policies to counteract the effects of aging, by prolonging working lives, for instance, or structural reforms that accelerate growth potential might be needed to durably lift the real rate of interest.

Equilibrium in the Market for Borrowable Funds



References:

Cynamon, Barry Z., and Steven M. Fazzari, 2015, "Inequality, the Great Recession and Slow Recovery," Cambridge Journal of Economics: bev016.

Dynan, Karen E., Jonathan Skinner, and Stephen P. Zeldes, 2014, "Do the Rich Save More?" Journal of Political Economy, Vol. 112, No. 2, pp. 397–444.

Gordon, Robert J, 2015, "Secular Stagnation: A Supply-Side View," The American Economic Review, Vol. 105, No. 5, pp. 54–59.

Gottfries, Axel, and Coen Teulings, 2015, "Can Demography Explain Secular Stagnation?" VoxEU.org, January.

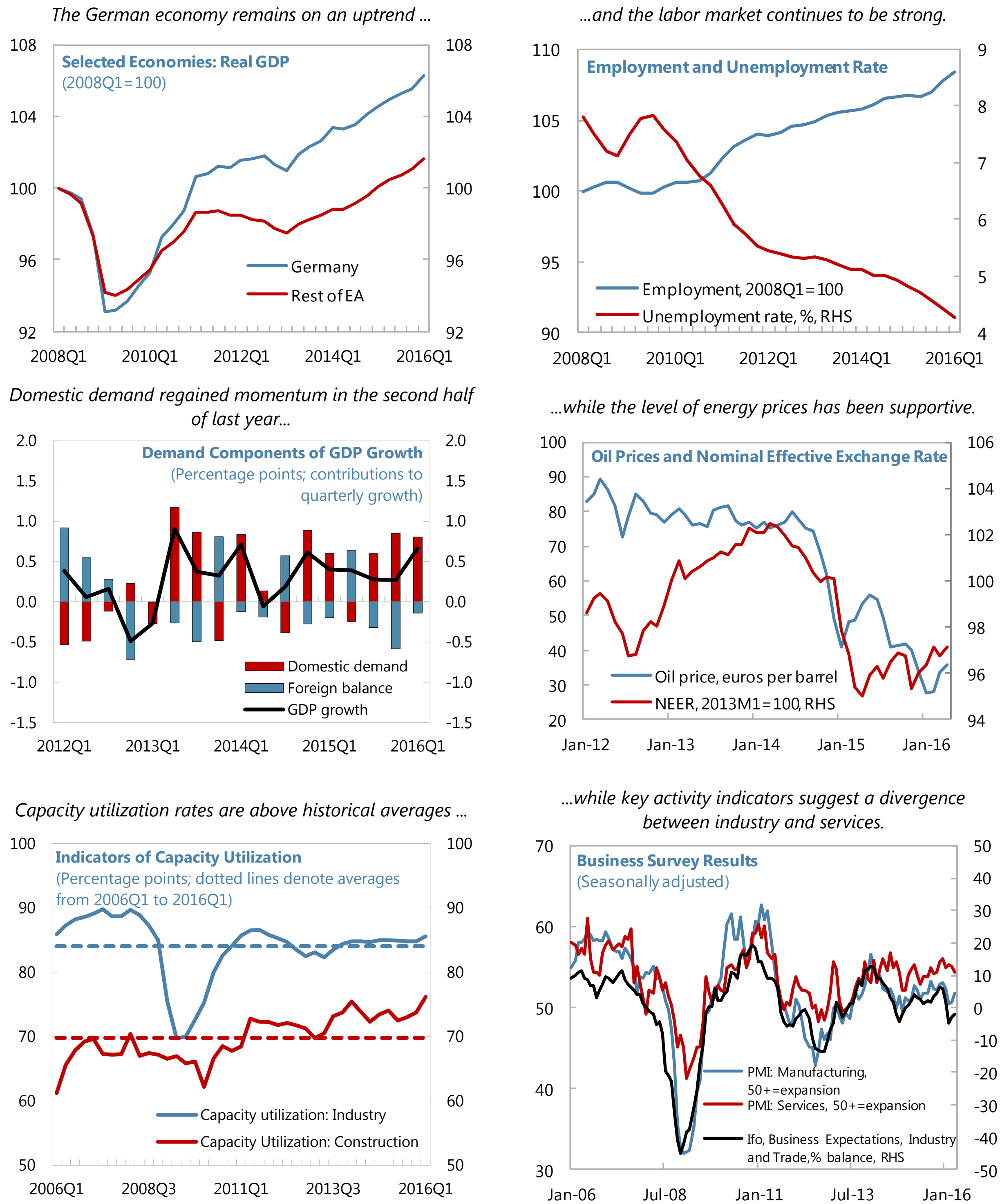
International Monetary Fund (IMF). 2014, "Perspectives on Global Real Interest Rates." In World Economic Outlook: Recovery Strengthens, Remains Uneven. Washington, April.

Laubach, Thomas, and John C. Williams, 2003, "Measuring the Natural Rate of Interest," Review of Economics and Statistics, Vol. 85, No. 4, pp. 1063–70.

Natal, Jean-Marc and Nicolas Stoffels, 2007, "Globalization, Markups and the Natural Rate of Interest", Swiss National Bank Working Paper", 2007–14.

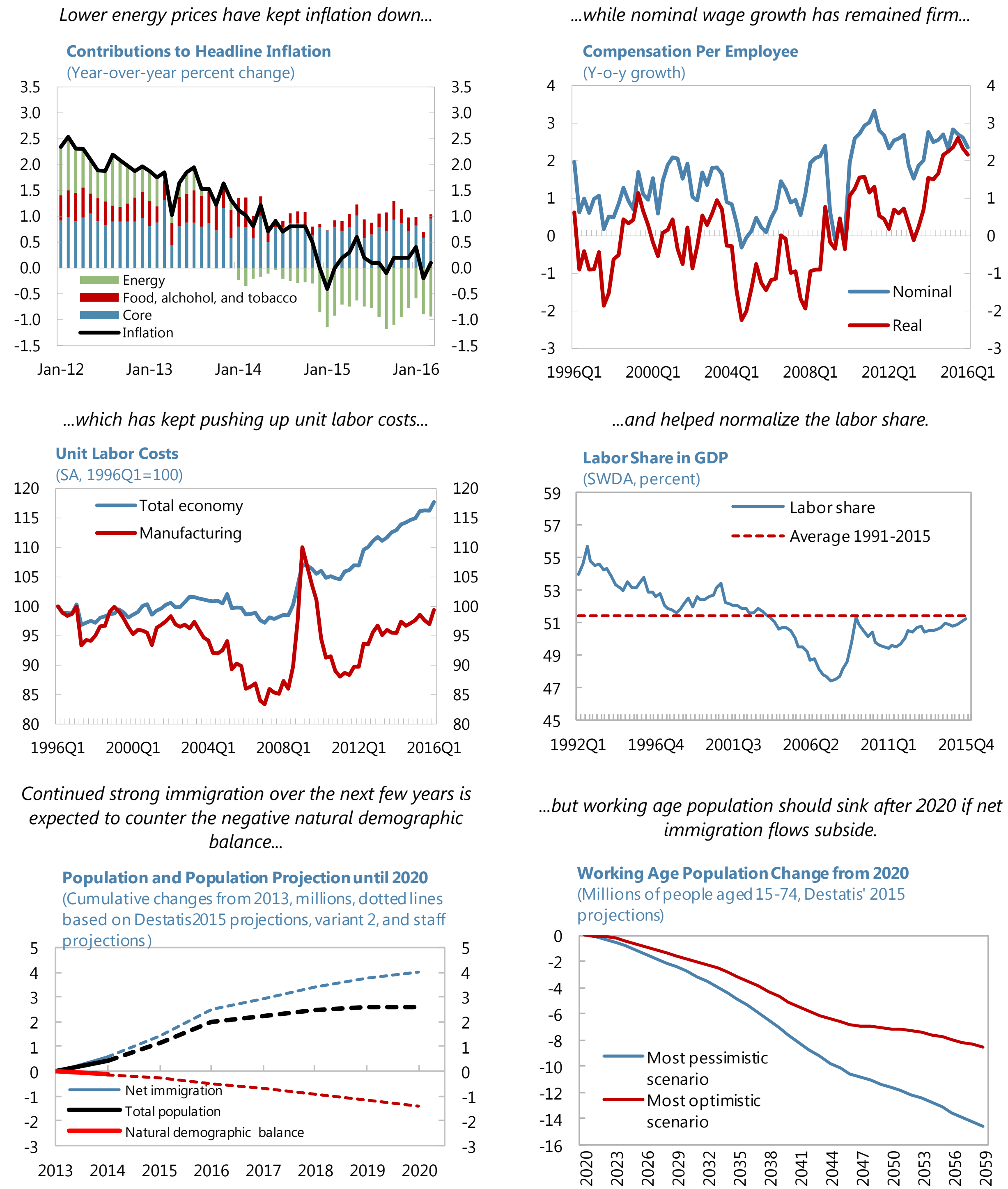
Piketty, Thomas, and Emmanuel Saez, 2014, "Inequality in the Long Run," Science, Vol. 344, No. 6186, pp. 838–43.

Figure 1. Germany: Growth Outlook



Sources: Destatis, Haver Analytics, IFO Institute, INS, Markit, and IMF staff calculations.

Figure 2. Germany: Prices and Labor Market

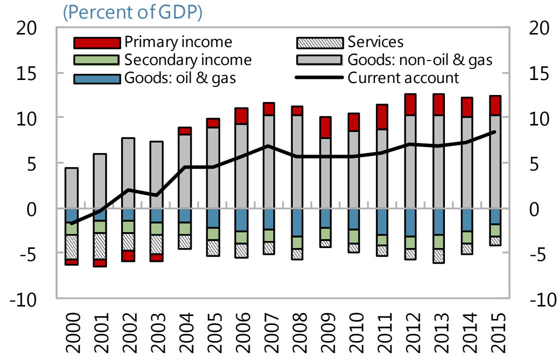


Sources: Bundesbank, Federal Statistical Office, Federal Statistical Office's 13th Coordinated Population Projection, Eurostat, Haver Analytics, and IMF staff calculations.

Figure 3. Germany: Balance of Payments

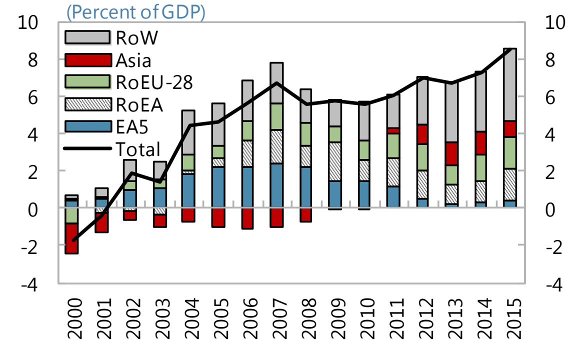
The current account increase in 2015 was mostly driven by a decline in the oil and gas deficit.

Current Account Balance Breakdown
(Percent of GDP)



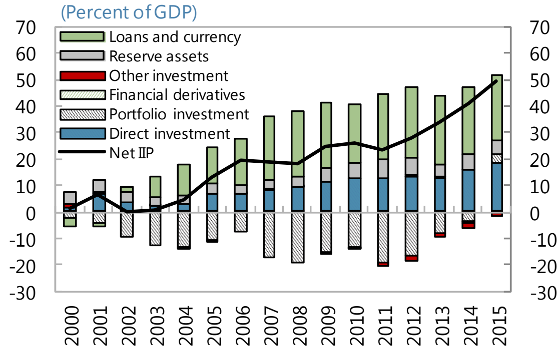
The rebalancing vis-à-vis EA halted in 2015 because the energy deficit with the Netherlands shrank.

Current Account Balance by Region
(Percent of GDP)



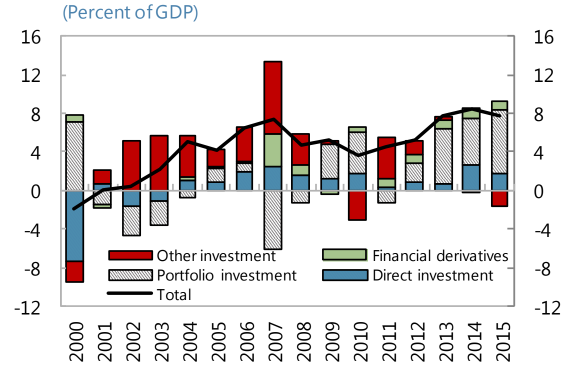
The NIIP kept improving.

Net International Investment Position by Instrument
(Percent of GDP)



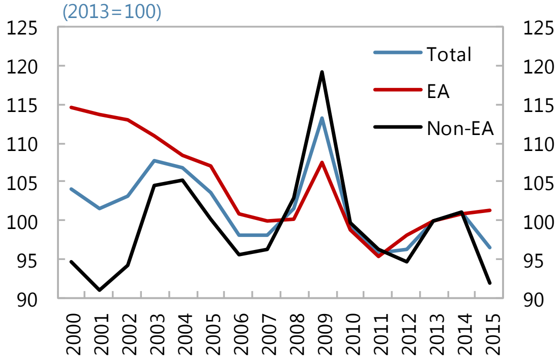
Portfolio investment was the largest item with negative other investment reflecting declining exposure to the eurosystem.

Capital and Financial Account
(Percent of GDP)



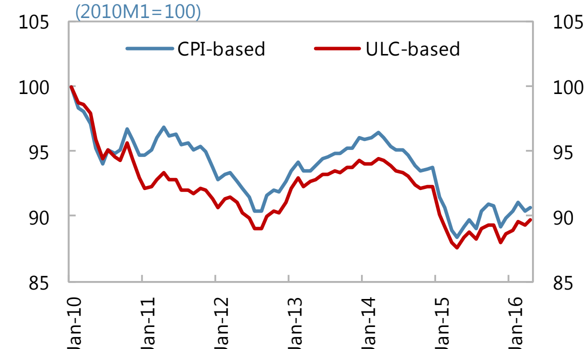
Stronger wage growth relative to EA trading partners contributed to realigning price competiveness.

REER ULC-Based 1/
(2013=100)



The REER has rebounded in early 2016 after a significant decline last year.

REER
(2010M1=100)

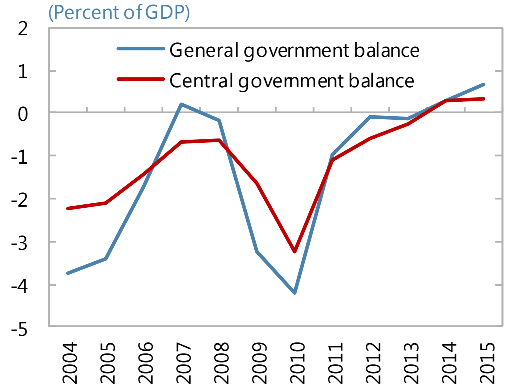


Source: Bundesbank, DOTS, GDS, Haver Analytics, IMF World Economic Outlook, and IMF staff calculations.
1/ Countries included in the calculations are Australia, Austria, Belgium, Canada, Colombia, Denmark, Estonia, Finland, France, Greece, Hong Kong SAR, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Singapore, Slovak Republic, Slovenia, South Africa, Spain, Suriname, Sweden, Switzerland, Taiwan Province of China, United Kingdom, and United States.
Note: EA5= Euro area economies (Greece, Ireland, Italy, Portugal, Spain) with high borrowing spreads during the 2010–11 sovereign debt crisis.

Figure 4. Germany: Fiscal Developments and Outlook

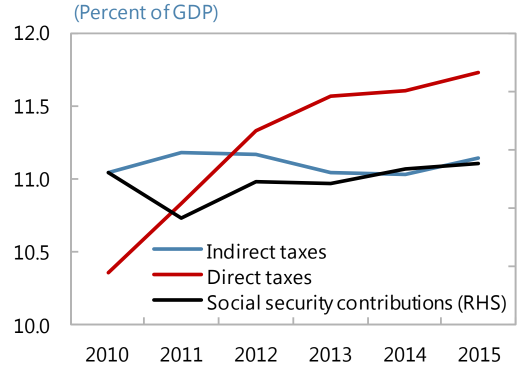
In 2015 the government surplus continued to rise...

Central and General Government Balances
(Percent of GDP)



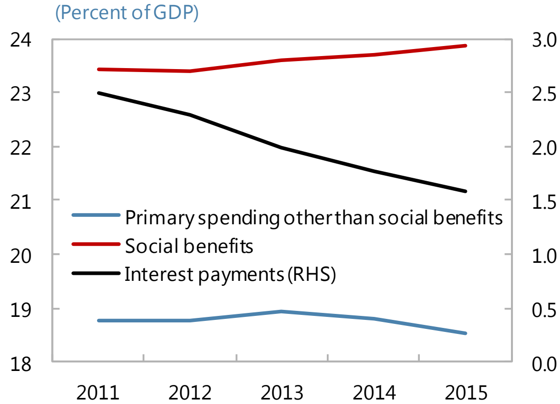
...supported by a broad increase in tax revenue...

Tax Revenue and Social Security Contributions
(Percent of GDP)



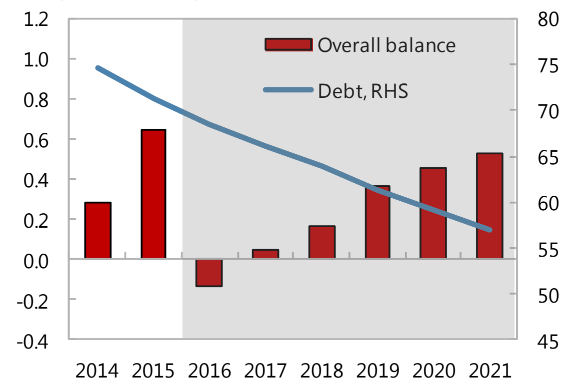
...and a decline in total spending, despite rising social transfers.

General Government Spending
(Percent of GDP)



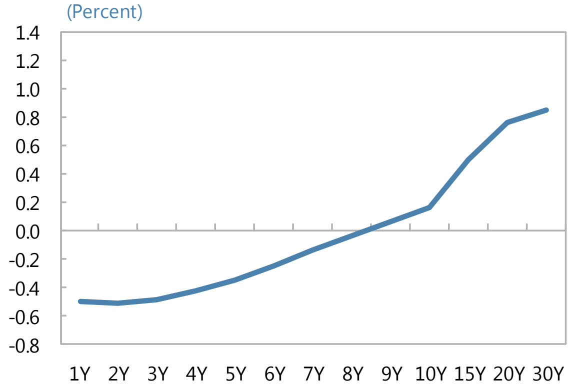
Current fiscal plans imply growing surpluses from 2016 onward...

General Government Fiscal Outlook, Staff Projection
(Percent of GDP)



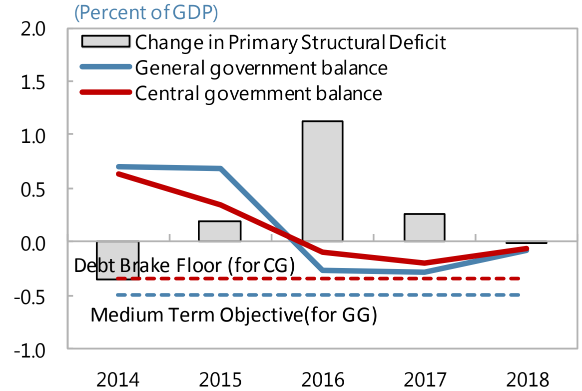
...mostly on account of favorable financing conditions.

Government Bond Yields Curve, June 7, 2016
(Percent)



In the short run, however, a fiscal expansion will reduce the balance.

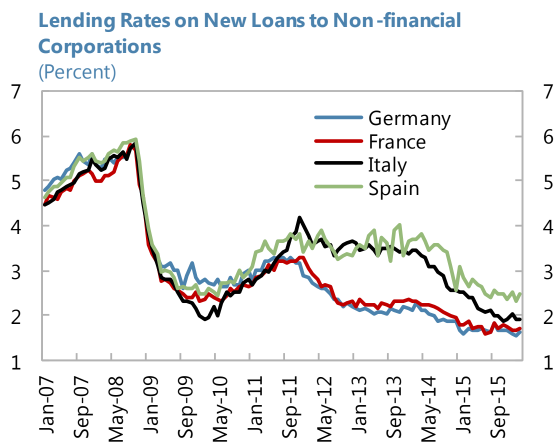
Fiscal Structural Balances Outlook
(Percent of GDP)

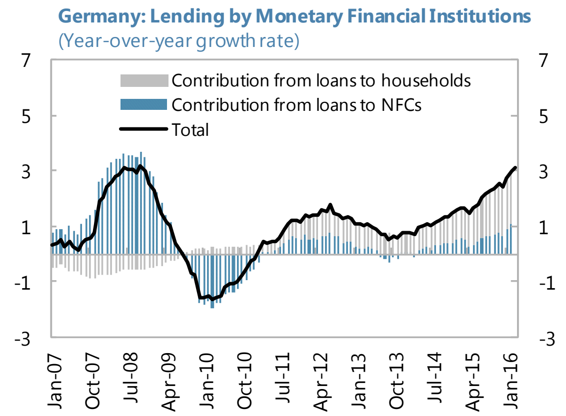


Sources: Bloomberg, Federal Statistical Office, Ministry of Finance, and IMF staff calculations and projections.

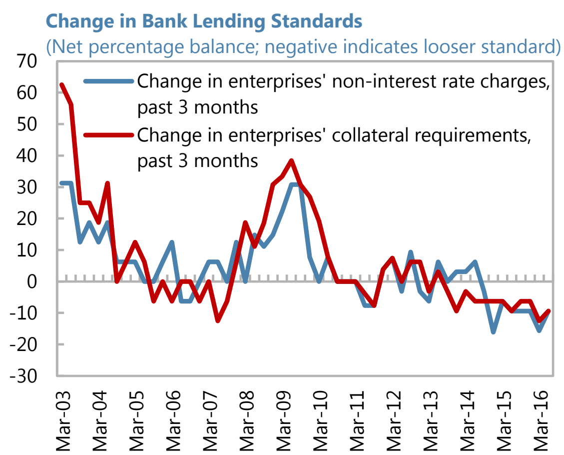
Figure 5. Germany: Credit Conditions and Asset Prices

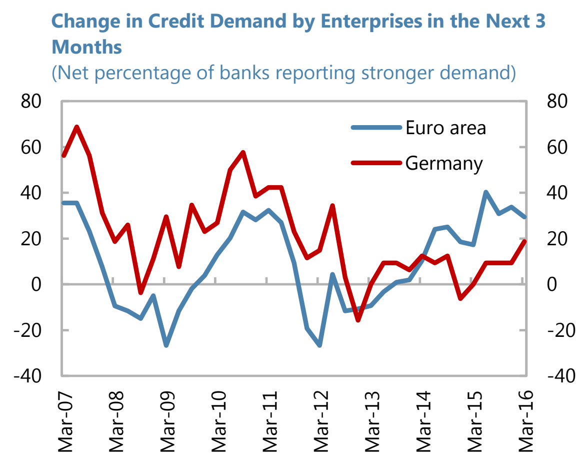
With very favorable lending rates... | *...credit growth to NFCs is finally picking up...*



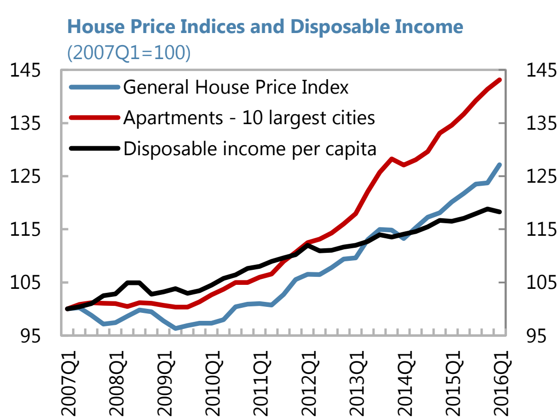


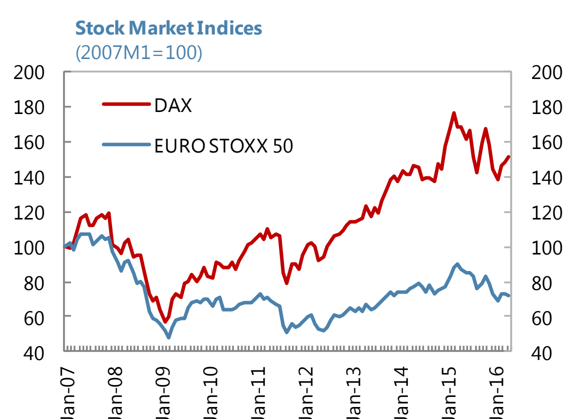
...supported by easier credit standards... | *...as demand for corporate credit rises.*





Housing prices keep rising faster than disposable income. | *Equity prices are off last year's peak.*

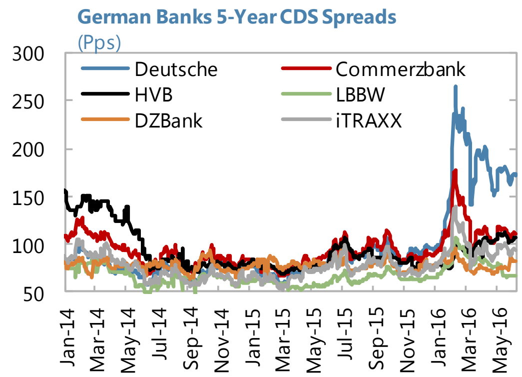




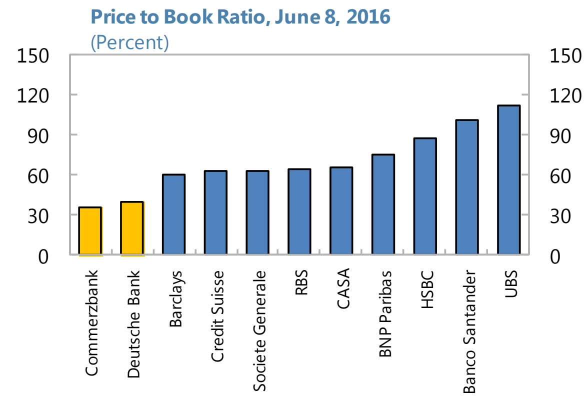
Sources: Bundesbank, ECB, Haver Analytics, Hypoport, and IMF staff calculations.
Note: Credit to non-financial corporations is corrected for a break in December 2014.

Figure 6. Germany: Recent Developments in the German Banking Sector

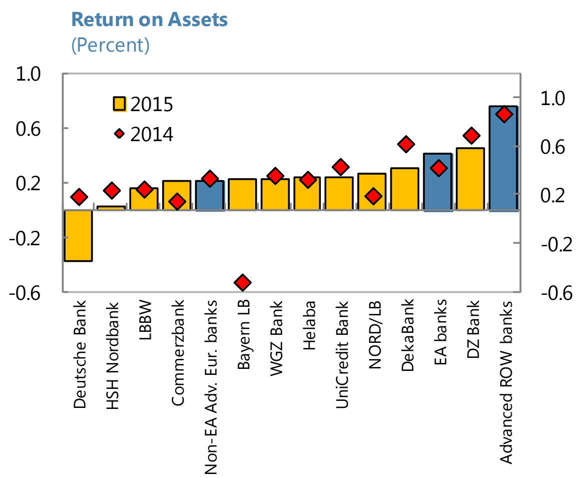
The two largest banks' perceived riskiness has spiked…



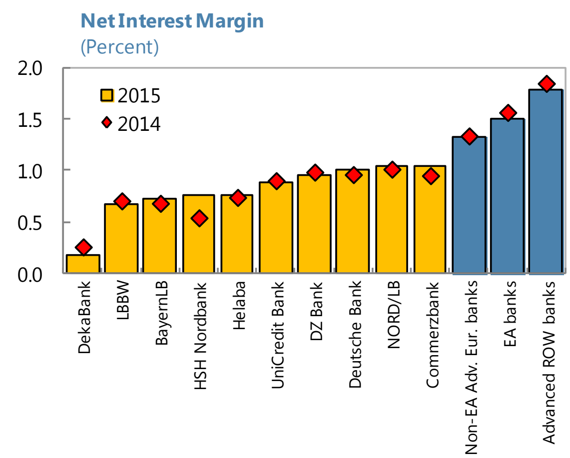
…and they keep trading at a discount to European peers.



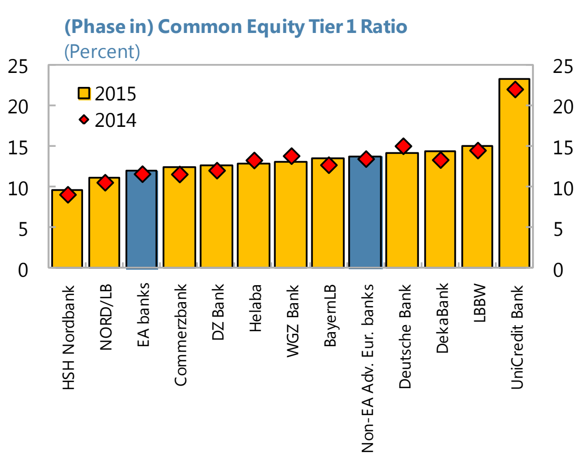
Large banks' profitability remains depressed…



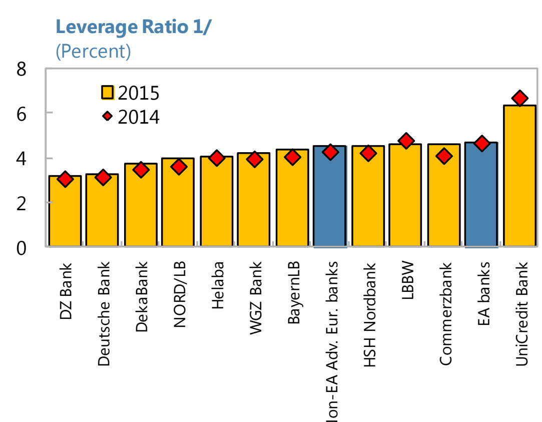
…in part because of a structurally low interest margin.



Risk-weighted capital buffers are generally comfortable…



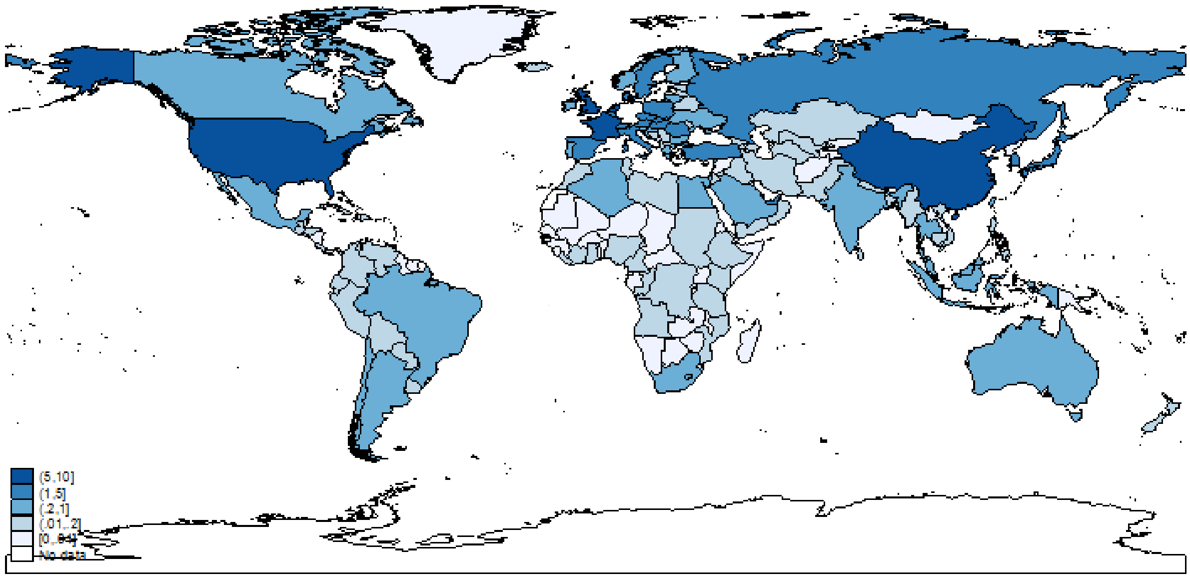
…but leverage remains higher than European peers.



Source: Bloomberg, ECB, IFS, SNL Financial, and IMF staff calculations.
1/ Leverage ratio is defined as common equity net of intangibles as a percent of total assets net of intangibles.
Note: 2015 data for return on assets and net interest margin are the Q1–Q3 averages for HSH Nordbank.

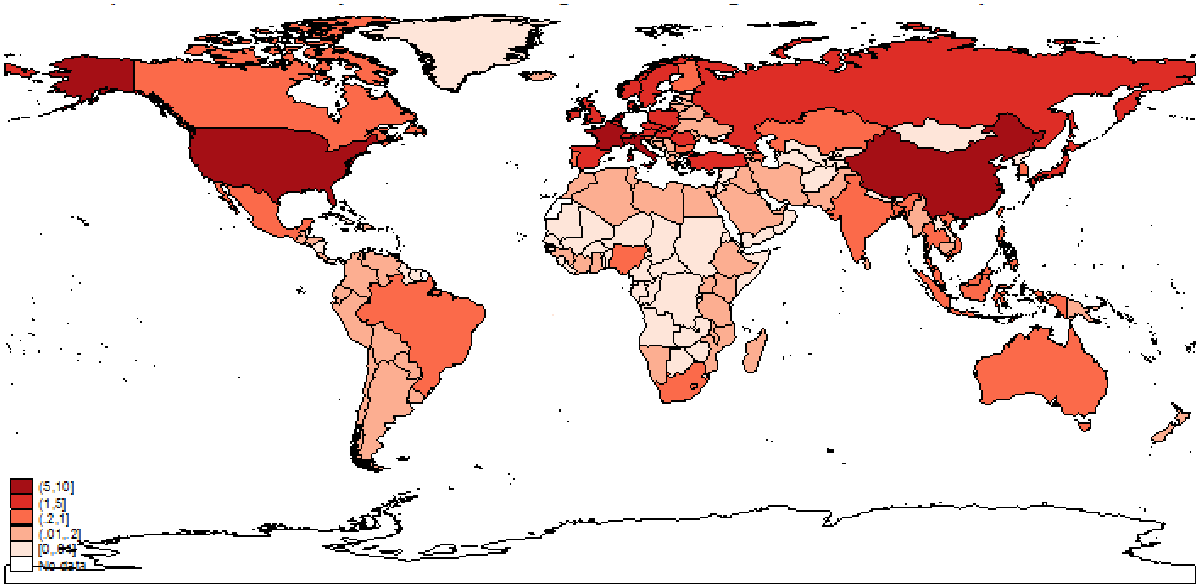
Figure 7. Germany: Trade Linkages

Share of Germany's Exports by Trading Partner, 2015 (in percent)



Note: The color of the country corresponds to the share of the country in Germany's exports.
Source: IMF staff calculations.

Exports to Germany as a Percentage of Trading Partner Total Exports, 2015 (in percent)

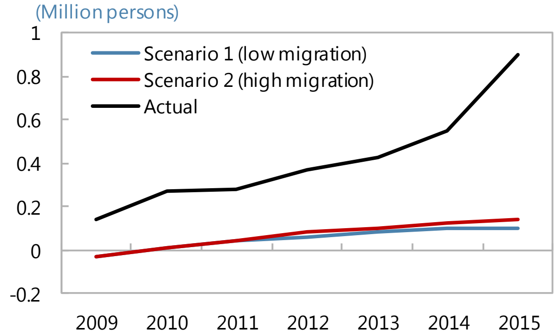


Note: The color of the country corresponds to the share of exports to Germany in the country's total exports.
Source: IMF staff calculations.

Figure 8. Germany: Housing Market Developments

An unexpected positive demographic shock...

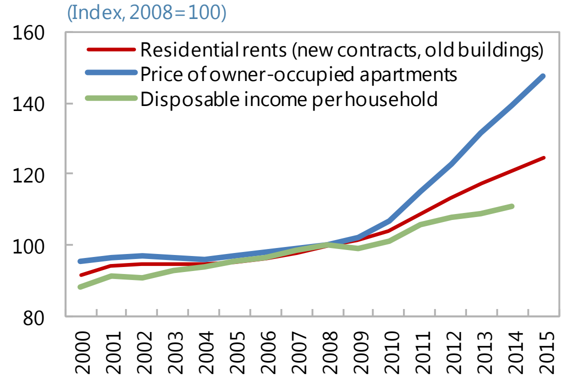
Net Immigration: 2009 Forecast versus Actual, 2009-2015
(Million persons)



Source: Destatis. The scenarios refer to those described in the 12th Coordinated Population Projections published in 2009.

...has contributed to push up residential housing prices and new rents...

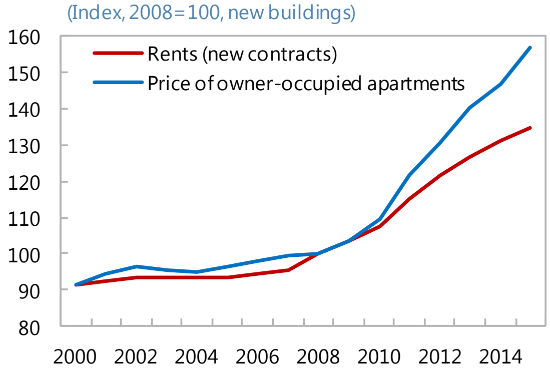
Residential Rents and Housing Prices
(Index, 2008=100)



Sources: Bulwiengesa and IMF staff calculations.

...especially in large cities.

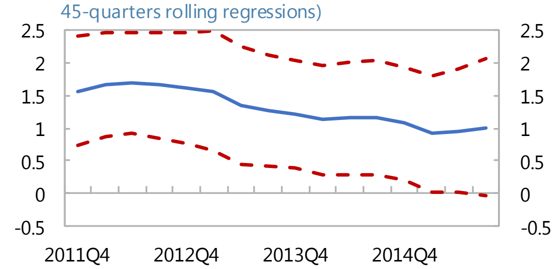
Residential rents and housing prices in large cities
(Index, 2008=100, new buildings)



Source: Bulwiengesa and IMF staff calculations.

The housing supply price elasticity has declined in recent years...

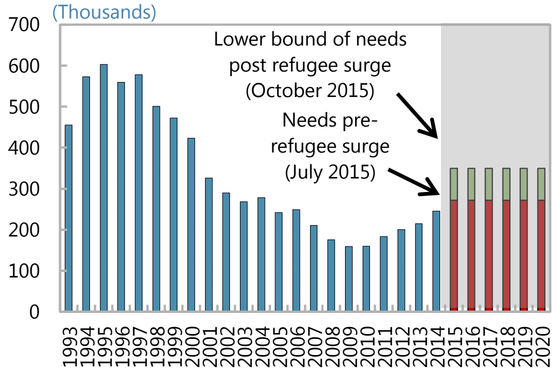
Housing Supply Price Elasticity
(regression point estimate +/- 2 standard deviations, 45-quarters rolling regressions)



Sources: IMF staff calculations. The ratio of residential investment to GDP is regressed on the ratio of house prices to construction costs, the ratio of construction costs to lagged land prices, and on the real long-term lending interest rate in a DOLS (1,1) framework. The reported coefficient is the coefficent of the ratio of house prices to construction costs.

...and supply needs to catch up with demand...

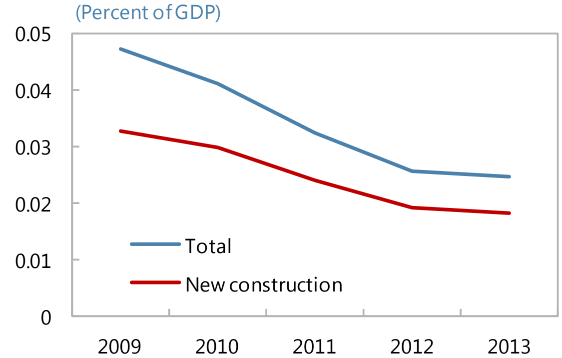
New Residential Housing Units: Completions and Needs
(Thousands)



Sources: Destatis and Ministry for the Environment.

...including in the subsidized segment.

Social Housing Promotion Budget
(Percent of GDP)



Sources: Wohngeld- und Mietenbericht 2014, Haver, and IMF staff calculations.

Table 1. Germany: Selected Economic Indicators, 2013–17

	2013	2014	2015	*Projections* 2016	2017
	(Percentage change)				
GDP 1/	0.4	1.6	1.4	1.7	1.5
Output gap (In percent of potential GDP)	-0.4	-0.2	-0.1	0.2	0.4
Private consumption	0.8	1.0	2.0	1.7	1.5
Public consumption	0.8	1.7	2.5	2.9	2.0
Gross fixed investment	-1.3	3.5	1.7	2.9	1.9
Construction	-1.1	2.9	-0.2	3.2	2.0
Machinery and equipment	-2.0	4.4	4.0	3.0	1.9
Final domestic demand	0.3	1.7	2.0	2.2	1.7
Inventory accumulation 2/	0.5	-0.3	-0.6	0.1	0.1
Total domestic demand	0.9	1.3	1.4	2.3	1.8
Exports of goods and nonfactor services	1.8	3.9	4.8	2.7	4.2
Imports of goods and nonfactor services	3.2	3.7	5.4	4.3	5.1
Foreign balance 2/	-0.4	0.4	0.1	-0.5	-0.1
	(Millions of persons, unless otherwise indicated)				
Employment and unemployment 3/					
Labor force	41.6	41.9	42.0	42.4	42.8
Employment	39.4	39.8	40.1	40.6	40.8
Unemployment	2.2	2.1	1.9	1.8	1.9
Unemployment rate (in percent)	5.2	5.0	4.6	4.3	4.5
	(Percentage change)				
Prices and incomes					
GDP deflator	2.1	1.7	2.1	1.5	1.5
Consumer price index (harmonized)	1.6	0.8	0.1	0.4	1.5
Compensation per employee (total economy)	1.8	2.6	2.6	2.6	2.7
Compensation per employee (manufacturing)	3.3	2.7	2.6	2.8	3.1
Unit labor cost (total economy)	2.2	1.9	1.8	2.0	2.0
Unit labor cost (manufacturing)	2.9	0.9	1.1	1.4	1.6
Real disposable income 4/	0.5	1.4	2.2	1.7	1.2
Household saving ratio (in percent)	9.2	9.5	9.7	9.5	9.4

Table 1. Germany: Selected Economic Indicators (concluded)

	2013	2014	2015	2016 *Projections*	2017 *Projections*
Public finances	(Billions of euros, unless otherwise indicated)				
General government					
Expenditure	1,256	1,291	1,331	1,392	1,428
(In percent of GDP)	44.5	44.3	44.0	44.5	44.4
Revenue	1,252	1,300	1,351	1,387	1,429
(In percent of GDP)	44.4	44.6	44.6	44.4	44.5
Overall balance 5/	-4	8	20	-4	2
(In percent of GDP)	-0.1	0.3	0.6	-0.1	0.1
Structural balance	4	21	21	-8	-9
(In percent of GDP)	0.1	0.7	0.7	-0.3	-0.3
Federal government					
Overall balance 5/	-8	9	10	-1	1
(In percent of GDP)	-0.3	0.3	0.3	0.0	0.0
General government debt	2,178	2,178	2,153	2,142	2,128
(In percent of GDP)	77.2	74.7	71.2	68.5	66.2
	(Billions of U.S. Dollars, unless otherwise indicated)				
Balance of payments					
Current account	252.9	282.9	285.4	286.4	281.9
(In percent of GDP)	6.8	7.3	8.5	8.2	7.7
Trade balance 6/	211.6	226.5	263.2	267.2	269.1
Services balance	-43.2	-35.4	-30.2	-36.6	-40.9
Factor income balance	65.8	62.4	63.7	65.4	62.5
Net private transfers	-29.7	-28.2	-25.5	-25.5	-25.5
Net official transfers	-14.1	-12.5	-14.0	-15.3	-16.5
Foreign exchange reserves (EUR billion, e.o.p.) 7/	28.1	30.6	33.4		
	(Percentage change)				
Monetary data					
Money and quasi-money (M3) 7/ 8/	2.6	4.9	9.2		
Credit to private sector 7/	0.8	0.6	2.4		
	(Period average in percent)				
Interest rates					
Three-month interbank rate 7/	0.2	0.2	0.0		
Yield on ten-year government bonds 7/	1.6	1.2	0.6		
Exchange rates					
Euro per US$	0.75	0.75	0.90		
Nominal effective rate (2005=100) 9/	101.0	102.0	97.1		
Real effective rate (2005=100) 10/	95.5	96.0	90.9		

Sources: Deutsche Bundesbank; Federal Statistical Office; IMF staff estimates and projections.
1/ Seasonally and working day adjusted (SWDA).
2/ Contribution to GDP growth.
3/ ILO definition.
4/ Deflated by national accounts deflator for private consumption; not SWDA.
5/ Net lending/borrowing.
6/ Excluding supplementary trade items.
7/ Data refer to end of December.
8/ Data reflect Germany's contribution to M3 of the euro area.
9/ Nominal effective exchange rate, all countries.
10/ Real effective exchange rate, CPI based, all countries.

Table 2. Germany: General Government Operations, 2013–21
(Percent of GDP)

				Projections					
	2013	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Revenue 1/	44.4	44.6	44.6	44.4	44.5	44.5	44.4	44.4	44.4
Taxes	22.6	22.6	22.9	22.8	22.9	23.0	23.0	23.1	23.1
Indirect taxes	11.2	11.2	11.1	11.1	11.2	11.2	11.2	11.2	11.2
Direct taxes	11.6	11.6	11.7	11.7	11.8	11.8	11.8	11.8	11.8
Social contributions	16.5	16.5	16.6	16.7	16.9	16.9	16.9	17.0	17.0
Grants	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Other current revenue	5.1	5.3	5.1	4.7	4.5	4.4	4.3	4.2	4.2
Expense	44.6	44.3	44.1	44.6	44.6	44.4	44.1	44.0	43.9
Compensation of employees	7.8	7.7	7.6	7.6	7.6	7.4	7.3	7.3	7.3
Goods and services	4.8	4.8	4.8	4.9	5.0	4.9	4.9	4.9	4.9
Interest	2.0	1.8	1.6	1.4	1.2	1.0	0.9	0.8	0.7
Subsidies	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0
Social benefits	23.6	23.7	23.9	24.4	24.6	24.6	24.7	24.7	24.7
Social benefits in kind	8.1	8.2	8.3	8.6	8.8	8.8	8.8	8.9	8.9
Social transfers	15.5	15.5	15.6	15.8	15.8	15.8	15.8	15.9	15.9
Pensions	8.9	8.8	8.9	9.0	9.1	9.0	9.0	9.1	9.1
Child benefits	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Unemployment benefits	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Other social transfers	4.5	4.6	4.7	4.7	4.7	4.7	4.7	4.8	4.8
Other expense	5.6	5.5	5.3	5.3	5.3	5.4	5.3	5.3	5.3
Net acquisition of nonfinancial assets	0.0	0.0	-0.1	0.0	-0.2	0.0	-0.1	0.0	0.0
Net lending/borrowing	-0.1	0.3	0.6	-0.1	0.1	0.2	0.4	0.5	0.5
Primary balance	1.8	2.1	2.2	1.3	1.2	1.2	1.3	1.3	1.3
Memorandum item:									
Structural balance	0.1	0.7	0.7	-0.3	-0.3	-0.1	0.1	0.3	0.4
Change in structural balance	0.3	0.6	0.0	-1.0	0.0	0.2	0.2	0.1	0.1
Public gross debt (Maastricht definition)	77.2	74.7	71.2	68.5	66.2	63.9	61.4	59.2	57.0

Sources: Ministry of Finance; Bundesbank; Federal Statistical Office; and IMF staff estimates and projections.
1/ Includes one-off proceeds from June 2015 auction of mobile-phone frequencies.

Table 3. Germany: Medium Term Projections, 2013–21

	2013	2014	2015	2016	2017	2018	2019	2020	2021
			Projections						
	(Percentage change unless otherwise indicated)								
Real sector									
Real GDP	0.4	1.6	1.4	1.7	1.5	1.4	1.3	1.2	1.2
Total domestic demand	0.9	1.3	1.4	2.3	1.8	1.7	1.6	1.6	1.6
Private consumption	0.8	1.0	2.0	1.7	1.5	1.5	1.5	1.5	1.5
Households saving ratio (in percent)	9.2	9.5	9.7	9.5	9.4	9.3	9.2	9.1	9.0
Foreign balance (contribution to growth)	-0.4	0.4	0.1	-0.5	-0.1	-0.2	-0.2	-0.2	-0.3
Output gap (percent of potential GDP)	-0.4	-0.2	-0.1	0.2	0.4	0.4	0.4	0.4	0.3
Employment (millions of persons)	39.4	39.8	40.1	40.6	40.8	41.0	41.2	41.4	41.5
Labor productivity (per employed person)	-0.3	0.7	0.9	0.6	0.7	0.8	0.9	0.9	0.9
Consumer prices	1.6	0.8	0.1	0.4	1.5	1.7	1.8	1.9	2.0
Compensation per employee	1.8	2.6	2.6	2.6	2.7	2.8	2.9	2.9	2.9
	(Percent of GDP)								
External sector									
Current account balance	6.8	7.3	8.5	8.2	7.7	7.4	7.2	7.0	6.8
Trade balance	5.6	5.8	7.8	7.6	7.4	7.1	6.8	6.5	6.2
Net international investment position	35.1	37.5	48.3	54.3	60.1	65.7	70.7	75.3	80.1
General government									
Overall balance	-0.1	0.3	0.6	-0.1	0.1	0.2	0.4	0.5	0.5
Gross debt	77.2	74.7	71.2	68.5	66.2	63.9	61.4	59.2	57.0

Sources: Federal Statistical Office, Bundesbank, and IMF staff estimates.

Table 4. Germany: Balance of Payments, 2013–21
(Percent of GDP)

	2013	2014	2015	2016	2017	2018	2019	2020	2021
				Projections					
Current account	6.8	7.3	8.5	8.2	7.7	7.4	7.2	7.0	6.8
Trade balance	6.0	6.6	7.7	7.4	7.1	6.8	6.4	6.0	5.6
Trade in goods	7.5	7.8	8.7	8.5	8.4	8.1	7.8	7.5	7.1
Exports	38.3	38.2	39.0	38.7	39.3	40.0	40.6	41.3	42.0
Imports	30.8	30.5	30.3	30.2	30.9	31.9	32.9	33.8	34.8
Trade in services	-1.5	-1.2	-1.0	-1.2	-1.3	-1.3	-1.4	-1.4	-1.5
Exports	7.3	7.5	7.9	7.7	7.8	8.1	8.3	8.5	8.7
Imports	8.8	8.7	8.9	8.8	9.1	9.4	9.6	9.9	10.3
Income balance	2.3	2.1	2.1	2.1	1.9	1.9	2.1	2.3	2.5
Receipts	6.8	6.6	6.4	5.1	4.4	4.4	5.1	5.9	6.8
Payments	4.5	4.4	4.3	3.1	2.4	2.5	3.0	3.6	4.3
Current transfers	-1.6	-1.4	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3
Capital and Financial Account	7.8	8.4	7.6	8.2	7.7	7.4	7.2	7.0	6.8
Capital account	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial account	7.8	8.4	7.7	8.2	7.7	7.4	7.2	7.0	6.8
Direct Investment	0.7	2.7	1.9	0.7	0.7	0.7	0.7	0.7	0.7
Domestic	3.2	5.7	5.1	3.4	3.4	3.4	3.4	3.4	3.4
Abroad	2.4	3.0	3.2	2.7	2.7	2.7	2.7	2.7	2.7
Portfolio investment balance	5.7	4.7	6.6	7.0	6.6	6.3	6.2	6.0	5.8
Financial derivatives	0.9	1.1	0.9	0.9	0.9	0.8	0.8	0.8	0.8
Other financial transactions	0.5	0.0	-1.6	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
Change in reserve assets	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
Net errors and omissions	1.0	1.0	-0.8	0.0	0.0	0.0	0.0	0.0	0.0

Sources: Bundesbank, Federal Statistical Office, IMF Statistics Department, and IMF staff estimates.

Table 5. Germany: International Investment Position, 2007–15
(Percent of GDP)

	2007	2008	2009	2010	2011	2012	2013	2014	2015
Assets	222.8	188.2	220.4	255.3	235.6	271.9	255.4	239.9	256.3
Direct investment	44.9	38.7	46.8	47.8	45.1	54.5	55.6	51.7	58.7
Portfolio investment	76.2	57.0	73.2	74.7	63.3	77.9	82.3	79.4	86.5
Equity and investment fund shares	27.7	15.6	20.6	21.6	17.2	21.1	24.5	24.3	28.4
Debt securities	48.5	41.4	52.6	53.0	46.1	56.8	57.8	55.1	58.2
Financial derivatives (other than reserves) and employee stock options				30.6	31.5	35.6	23.2	24.8	21.7
Other investment	97.8	88.8	95.1	95.9	89.4	96.9	89.0	79.1	84.1
Reserve assets	4.0	3.7	5.3	6.3	6.4	7.0	5.3	5.0	5.2
Liabilities	202.7	171.0	194.6	229.3	213.9	243.2	220.3	202.4	208.0
Direct investment	36.2	30.2	35.4	35.4	33.3	40.9	42.6	37.1	40.5
Portfolio investment	94.6	75.3	88.8	88.1	81.0	94.9	90.6	82.9	83.5
Equity and investment fund shares	26.4	12.5	18.9	19.5	15.0	19.8	22.8	19.5	21.6
Debt securities	68.2	62.8	69.9	68.6	65.9	75.1	67.8	63.4	61.9
Financial derivatives (other than reserves) and employee stock options				30.7	32.0	35.3	22.8	25.5	22.1
Other investment	71.9	65.5	70.4	75.2	67.7	72.0	64.4	57.0	61.9
Net International Investment Position	20.1	17.2	25.9	25.9	21.7	28.8	35.1	37.5	48.3
Direct investment	8.7	8.6	11.5	12.4	11.8	13.6	13.0	14.6	18.2
Portfolio investment	-18.4	-18.3	-15.6	-13.4	-17.7	-17.0	-8.3	-3.5	3.0
Financial derivatives (other than reserves) and employee stock options				-0.1	-0.5	0.2	0.4	-0.7	-0.4
Other investment	25.9	23.3	24.8	20.7	21.6	24.8	24.6	22.1	22.2

Sources: IMF Statistics Department and IMF staff calculations.
Note: Based on Balance of Payments Manual 6.

Table 6. Germany: Core Financial Soundness Indicators for Banks, 2010–15

(Percent)

	2010	2011	2012	2013	2014	2015
Capital adequacy 1/						
Regulatory capital to risk-weighted assets	16.1	16.4	17.9	19.2	18.0	18.3
Commercial banks	15.4	15.6	17.8	18.9	17.2	17.3
Landesbanken	17.1	17.7	18.8	21.3	18.4	19.4
Savings banks	15.1	15.8	15.9	16.4	16.6	16.7
Credit cooperatives	14.7	15.6	15.8	16.6	17.4	17.6
Regulatory Tier I capital to risk-weighted assets 2/	11.8	12.1	14.2	15.6	15.4	15.7
Commercial banks	12.9	13.1	15.0	16.1	15.5	15.5
Landesbanken	12.1	12.7	14.0	16.9	14.7	15.6
Savings banks	9.9	10.5	12.5	13.4	14.5	14.8
Credit cooperatives	9.8	10.4	11.1	12.0	13.5	14.1
Asset composition and quality						
Sectoral distribution of loans to total loans						
Loan to households	26.2	26.2	26.8	28.5	28.7	29.0
Commercial banks	22.3	21.4	20.8	22.9	22.3	22.2
Landesbanken	5.4	5.4	5.6	5.8	5.6	5.5
Savings banks	57.7	56.2	57.2	57.4	57.0	58.2
Credit cooperatives	67.0	66.8	68.7	69.3	69.8	68.8
Loans to non-financial corporations	14.6	14.6	14.9	15.6	15.2	15.2
Commercial banks	12.1	11.9	11.5	12.3	12.0	12.0
Landesbanken	18.4	19.1	20.8	22.4	22.5	23.5
Savings banks	20.1	20.3	21.5	22.0	21.7	22.4
Credit cooperatives	14.3	14.1	15.2	16.0	16.6	16.8
NPLs to gross loans 3/	3.2	3.0	2.9	2.7	2.3	
Commercial banks	2.1	2.0	1.9	1.8	1.4	
Landesbanken	4.1	4.1	4.5	4.8	4.8	
Savings banks	3.8	3.5	3.1	2.8	2.3	
Credit cooperatives	3.9	3.5	3.2	2.8	2.4	
NPLs net of provisions to capital 3/	34.2	31.6	27.4	23.8	20.9	
Commercial banks	20.4	19.1	16.4	13.3	7.8	
Landesbanken	46.0	45.6	46.6	49.4	53.6	
Savings banks	36.2	35.3	31.5	27.6	22.6	
Credit cooperatives	38.1	34.0	30.8	26.8	22.7	

Table 6. Germany: Core Financial Soundness Indicators for Banks (concluded)

(Percent)

	2010	2011	2012	2013	2014	2015
Earnings and profitability						
Return on average assets (after-tax)	0.2	0.3	0.2	0.2	0.2	
Commercial banks	0.1	0	0.1	0.1	0.1	
Landesbanken	-0.1	0	0.1	-0.1	-0.1	
Savings banks	0.4	1.3	0.6	0.5	0.5	
Credit cooperatives	0.5	0.7	0.7	0.8	0.6	
Return on average equity (after-tax)	3.7	6.5	5.6	3.5	3.95	
Commercial banks	2.0	0.8	3.7	3.5	3.51	
Landesbanken	-1.3	-1	2.8	-1.6	-1.5	
Savings banks	7.1	22.9	9.3	7.3	6.72	
Credit cooperatives	8.0	11.9	11.5	11.0	8.59	
Interest margin to gross income	73.2	72.9	71.5	71.9	74.4	
Commercial banks	62.7	59.8	61.8	63.0	66.4	
Landesbanken	84.4	94.5	82.3	78.5	89.9	
Savings banks	79.1	79.6	79.4	80.0	79.8	
Credit cooperatives	78.9	78	78.2	78.6	79.2	
Trading income to gross income	4.5	3.7	5.5	4.9	3	
Commercial banks	9.1	9.2	9.9	8.0	5.8	
Landesbanken	3.9	-4.8	6.7	12.5	1.2	
Savings banks	0.2	-0.1	0.1	0.1	0	
Credit cooperatives	0.0	0.1	0.1	0.0	0	
Noninterest expenses to gross income	63.7	63.9	64.2	69.1	69.1	
Commercial banks	72.5	67.9	67.2	72.8	73.4	
Landesbanken	54.7	59.8	59.6	61.8	70.9	
Savings banks	62.8	62.7	65.7	67.2	68.3	
Credit cooperatives	63.7	63.9	65.9	64.6	65.9	
Liquidity						
Liquid assets to total short-term liabilities	137.0	137.9	144.2	140.5	145.5	146.5
Commercial banks	126.2	124.3	129.5	125.1	128.3	128.4
Landesbanken	131.2	144.3	135.8	138.5	139	139.2
Savings banks	216.2	210.1	233.6	234.6	238.9	246.3
Credit cooperatives	203.8	208.4	230.6	231.8	233.3	241.7
Sensitivity to market risk						
Net open positions in FX to capital	4.4	4.5	3.9	3.8	4.0	4.6
Commercial banks	2.2	2.3	2.0	1.8	1.9	1.8
Landesbanken	5.5	7.4	4.8	5.3	7.3	10.6
Savings banks	9.1	7.7	7.8	7.7	4.8	4.8
Credit cooperatives	8.1	8.3	8.1	8.0	7.7	7.9

Source: Deutsche Bundesbank. The authorities provide annual data only and disseminate them once a year.

1/ A methodological break in the supervisory time series on the capital adequacy of German banks has taken place in 2007 due to changes in the regulatory reporting framework, following Basel II.

2/ 1998-2006 according to Capital Adequacy Regulation, Principle I. Since 2007 according to Solvency Regulation.

3/ A methodological break in the NPL series has taken place in 2009. Due to changes in the regulatory reporting framework for the audit of German banks.

Table 7. Germany: Additional Financial Soundness Indicators, 2010–15

(Percent, unless otherwise indicated)

	2010	2011	2012	2013	2014	2015
Deposit-taking institutions						
Capital to assets	4.3	4.4	4.7	5.5	5.6	5.9
Commercial banks	4.1	4.0	4.1	4.9	5	5.2
Landesbanken	3.9	4.0	4.4	5.0	4.9	5.4
Savings banks	5.4	5.7	6.9	7.5	7.9	8.3
Credit cooperatives	5.5	5.8	6.3	7.0	7.4	7.7
Geographical distribution of loans to total loans						
Germany	74.9	75.7	76.8	76.8	74.6	75.9
EU-member countries	17.6	16.8	16.0	16	15.8	15.1
Others	7.4	7.5	7.2	7.2	9.6	9
FX loans to total loans	11.5	11.0	10.5	10	11.5	11.4
Personnel expenses to noninterest expenses	52.7	52	52.9	51.9	51.5	
Commercial banks	46.3	45.5	46.6	44.7	42.7	
Landesbanken	48.8	47.9	49.6	48.4	50.2	
Savings banks	61.9	61.7	62.7	62.3	63.4	
Credit cooperatives	60.5	59.7	59.6	59.8	60.1	
Trading and fee income to total income	26.8	27.1	28.5	28.1	25.6	
Commercial banks	37.3	40.2	38.2	37.0	33.6	
Landesbanken	15.6	5.5	17.7	21.5	10.1	
Savings banks	20.9	20.4	20.6	20.0	20.2	
Credit cooperatives	21.1	22	21.8	21.4	20.8	
Funding						
Customer deposits to total (non-interbank) loans	73.6	73.6	75.7	84.5	86.9	85.0
Commercial banks	85.0	83.1	84.0	104.5	109.2	101.7
Landesbanken	31.5	33.7	33.6	41.6	40.2	43.7
Savings banks	106.9	106.9	107.7	108.5	110	109.5
Credit cooperatives	119.0	117.7	118.7	116.9	117.5	116.9
Deposits/total assets	60.8	60.0	61.3	64.6	63.9	65.8
Commercial banks	58.6	58.0	60.3	65.6	63.3	66.2
Landesbanken	52.6	51.4	51.8	55.4	55.1	58.6
Savings banks	86.7	86.7	86.8	86.7	86.7	86.6
Credit cooperatives	85.9	86.3	86.6	86.8	87	87.1
Interbank assets/total assets	35.0	34.8	34.3	35.0	33.9	33.7
Commercial banks	32.6	32.7	34.1	35.9	34.8	36.4
Landesbanken	39.1	36.5	34.1	34.8	32.6	30.8
Savings banks	25.3	24.9	22.7	21.2	20.3	18.2
Credit cooperatives	28.2	28.0	26.0	24.2	22.7	21.6
Interbank liabilities/total assets	23.4	21.8	21.7	21.5	21.7	21.6
Commercial banks	24.2	22.5	23.6	22.6	23.6	23.9
Landesbanken	27.0	25.2	24.4	28.0	27.9	28.1
Savings banks	17.4	16.6	15.5	14.1	13.1	11.9
Credit cooperatives	14.1	14.3	14.2	13.2	13.1	12.7
Securitized funding/total assets						
Commercial banks						
Landesbanken						
Savings banks						
Credit cooperatives						
Loans/assets	38.2	37.7	38.4	40.3	39.5	41.1
Commercial banks	27.5	27.3	27.2	30.0	28.1	29.3
Landesbanken	35.0	36.1	38.0	39.5	40.5	43.9
Savings banks	60.9	61.7	62.9	63.7	63.9	65.1
Credit cooperatives	57.4	58.2	59.0	60.6	61.2	61.8
Securities holdings/assets	19.5	18.1	18.0	19.4	19	18.5
Commercial banks	12.6	11.0	11.0	13.0	12.8	12.6
Landesbanken	20.1	19.4	19.0	21.7	20.9	19.9
Savings banks	26.6	25.0	25.4	25.2	25.2	25.2
Credit cooperatives	27.5	26.6	27.8	27.4	27.8	26.9
Off-balance sheet operations to total assets						
of which : interest rate contracts						
of which : FX contracts						
Spread between highest and lowest interbank rates 7/	12.8	14.4	9.6	3.9	4.09	8.9
Spread between reference loan and deposit rates 8/	343		324	326	319	301

Table 7. Germany: Additional Financial Soundness Indicators (concluded)

(Percent, unless otherwise indicated)

	2010	2011	2012	2013	2014	2015
Insurance sector						
Solvency ratio, Life	180.8	177.0	169.0	162.0		
Solvency ratio, Non-life (without reinsurance and health insurance)	314.0	312.0	314.0	317.0		
Return on average equity, Life 9/	9.8	9.7	9.5	6.1		
Return on average equity, Non-life 9/ (without reinsurance and health insurance)	3.3	2.8	3.2	3.8		
Market liquidity						
Average bid-ask spread in the securities market (government bills)	0.0	0.0	0.01	0.01	0.0	0.0
Average bid-ask spread in the securities market (corporate securities)	0.1	0.3	0.01	0.01	0.01	
Corporate sector						
Total debt to equity 1/	93.5	102.7	91.5	85.9	84.6	
Total debt to GDP 2/	133.7	128.9	129.6	131.1	129.9	
Return on invested capital 3/ 4/	8.6		6.4	9.1		
Earnings to interest and principal expenses 1/ 5/	1021.3	1233.4	1304.0	1339.6	1467.9	
Number of applications for protection from creditors 1/ 6/	15283.0	14553.0	13951.0	14344.0	13480.0	
Households						
Household debt to GDP 1/	62.0	59.8		56.2	55.1	
Household debt service and principal payments to income 1/ 5/	3.2	2.9		2.1	1.8	
Real estate markets						
Real estate prices, new dwellings 10/	93.1	100.0	106.8	114.5	121.1	129.0
Real estate prices, resale 10/	94.6	100.0	106.8	114.7	120.6	127.9
Real estate prices, new and resale 10/	94.4	100.0	106.8	114.7	120.6	128.1
Real estate prices, commercial property 11/	100.0	104.8	110.7	117.6	125.8	134.9
Residential real estate loans to total loans	16.8	16.7	17.1	18.3	19.0	19.2
Commercial real estate loans to total loans	5.7	5.7	5.7	5.9	5.8	5.8

Source: Deutsche Bundesbank. The authorities provide annual data only and disseminate them once a year.

1/ Indicator compiled according to definitions of the Compilation Guide on FSIs.

2/ Total debt to corporate gross value added.

3/ Return defined as net operating income less taxes, where net operating income and taxes are compiled according to the FSI Compilation Guide.

4/ Invested capital estimated as balance sheet total less other accounts payable (AF.7 according to ESA 1995).

5/ Excluding principal payments.

6/ Resident enterprises that filed for bankruptcy.

7/ Spread between highest and lowest three month money market rates as reported by Frankfurt banks (basis points).

8/ Spread in basis points.

9/ Profits after tax devided by equity.

10/ Residential property price index (yearly average, 2011 = 100); source: Bundesbank calculations based on price data provided by bulwiengesa AG for 127 towns and cities, weighted by transactions.

11/ Commercial property price index (yearly average, 2010 = 100), source: capital growth data provided by bulwiengesa AG for 127 towns and cities; seperate indices are calculated for office property, retail property, residential property and logistic property.

Annex I. Public Debt Sustainability Analysis

Public debt continues to fall, and is expected to remain sustainable, given high primary surpluses and a favorable interest rate-growth differential projected through the medium term. Under the current macroeconomic outlook, the public debt-to-GDP ratio is still expected to fall below the 60 percent mark by 2020, from 71.2 percent in end 2015. A negative growth shock represents the largest risk to the debt outlook. Also, the realization of contingent liabilities related to future bank recapitalization needs or worse than expected performance of winding-down institutions would push debt up by about 3 percent of GDP. In both cases, gross financing needs would temporarily rise above 15 percent of GDP. Nevertheless, debt would swiftly return to a firm downward path after the shock.

A. Baseline Scenario

Macroeconomic assumptions. Real GDP growth is expected to remain at 1.8 percent in 2016, supported by the stimulus provided by QE and lower oil prices, as well as fiscal stimulus and robust real wage growth. In the medium run, growth should converge to its potential level, estimated at 1.2 percent. Inflation—based on GDP deflator—should fall back to 1.5 percent in 2016, and remain close to this level thereafter. Sovereign interest rates continue to fall at all maturities, and are currently negative up to eight years maturity. Thus, average interest rates are yet lower than one year ago, and are expected to drop from 2.2 percent in 2015 to 1.3 percent in 2021.[1]

Germany's high level of government debt calls for using the higher scrutiny framework. Public gross debt is currently above the indicative DSA threshold for high scrutiny of 60 percent of GDP. Debt increased significantly over 2009–10, reaching a peak of 82.5 percent of GDP, reflecting sizable fiscal stimulus, large financial sector support and euro zone crisis-related lending. Since the peak, it has declined gradually on the back of fiscal consolidation and a favorable interest rate-growth differential. Estimated gross financing needs are however below 15 percent of GDP through the forecast horizon.

Realism of baseline assumptions. The forecasts of macro-fiscal variables affecting debt dynamics have been on the conservative side. The median forecast error for real GDP growth during 2007–15 is -0.11 percent, suggesting that there is slight upward bias in the staff projections, but the forecast bias is in line with other surveillance countries. Similarly, the median forecast error for inflation (GDP deflator) is 0.54 percent, suggesting that the staff overestimated inflation in the past (particularly post-2009). The median forecast bias for the primary balance is relatively large, at 1.16 percent of GDP, among the most conservative for surveillance countries.

Cross-country experience suggests that the projected fiscal adjustment is feasible. Both the maximum 3 year adjustment in the cyclically-adjusted primary balance (CAPB) over the projection period (½percent of GDP) and 3-year average cyclically adjusted primary balance are not ambitious

[1] The interest rate on new borrowing is derived from forecasts of the real interest rate and inflation, and it does not necessarily match market-based interest rate forecasts. Using market-based forecasts would make little difference to the debt sustainability analysis.

in cross-country comparison. Germany was able to deliver larger fiscal consolidations in the past, notably in 2011 and 2012.

B. Shocks and Stress Tests

Germany's government debt should remain below 75 percent of GDP under plausible macro-fiscal shocks, while gross financing needs would remain below 18 percent of GDP. Under all considered macro-fiscal stress tests, both the debt-to-GDP ratio and gross financing needs either continue to fall or swiftly return to a downward path after the shock. Temporary shocks to real GDP growth, a combined macro-fiscal shock, or a contingent liability shock would nonetheless drive a temporary increase in debt and/or gross financing needs. Given the historical variability of growth, debt dynamics in Germany is most sensitive to growth shocks.

List of shocks and stress tests[2]

- **Growth shock**. Under this scenario, real output growth rates are lower than in the baseline by one standard deviation over 2017–18, i.e. 2.8 percentage points. The assumed decline in growth leads to lower inflation (0.25 percentage points per 1 percentage point decrease in GDP growth) and the interest rate is assumed to increase 25 basis points for every 1 percent of GDP worsening of primary balance. Debt (gross financing needs) would peak at 74 (17) percent of GDP in this case, and converge to 66 (12) percent of GDP by 2021.
- **Primary balance shock.** This scenario examines the effect of a dual shock of lower revenues and rise in interest rate, leading to a cumulative 1.4 percent deterioration in the primary balance over 2017–18 (one standard deviation shock to the primary balance). The shock would result in a modest deterioration of debt dynamics.
- **Interest rate shock**. This scenario assumes a 400 basis points increase in debt servicing costs throughout the forecast horizon, mimicking the historical maximum interest rate experienced since 2006. The effect on public debt and gross financing needs would also be relatively modest.
- **Additional stress test**: Combined macro-fiscal shock. This test combines shocks to growth, the interest rate, and the primary balance; while avoiding double-counting the effects of individual shocks. The impact on debt dynamics is slightly worse than that of a growth shock.
- **Additional stress test**: Contingent fiscal shock. This scenario assumes a cumulative 3 percent of GDP (about 90 billion euros) additional support to the financial sector over 2017–18 comprising of additional re-capitalization needs in the banking system (55 billion euros), a call on half of capital shield guarantees (25 billion euros), and worse than expected performance of portfolios of winding-down institutions (10 billion euros). While a sizable shock, the impact on the debt ratio is relatively limited, and a convergence to 60 percent is still achieved in 2021. Gross financing needs would remain comfortably below 15 percent.

[2] Given that virtually all outstanding sovereign debt is denominated in euros, the scenario of a real exchange rate shock would not have a relevant effect on debt and is therefore not discussed.

Germany Public Sector Debt Sustainability Analysis (DSA)—Baseline Scenario

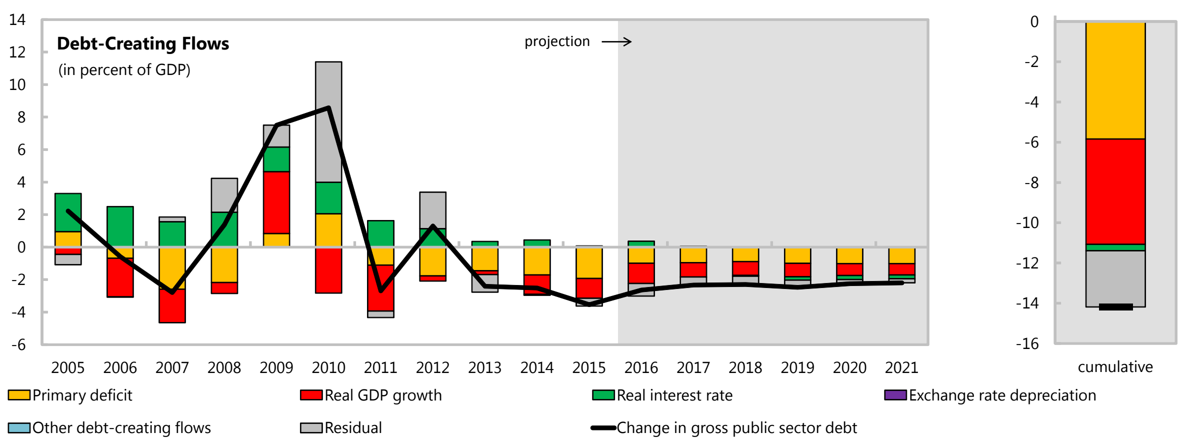
(in percent of GDP unless otherwise indicated)

Debt, Economic and Market Indicators [1/]

	Actual			Projections						As of June 09, 2016		
	2005-2013 [2/]	2014	2015	2016	2017	2018	2019	2020	2021			
Nominal gross public debt	72.3	74.7	71.2	68.5	66.2	63.9	61.4	59.2	57.0	EMBIG (bp) 3/		0
Public gross financing needs	16.3	15.0	13.9	14.8	12.3	12.6	10.8	11.1	10.8	5Y CDS (bp)		19
Real GDP growth (in percent) [4/]	1.3	1.8	1.8	1.8	1.3	1.3	1.3	1.2	1.2	Ratings	Foreign	Local
Inflation (GDP deflator, in percent)	1.2	1.7	2.1	1.5	1.5	1.5	1.6	1.6	1.7	Moody's	Aaa	Aaa
Nominal GDP growth (in percent)	2.5	3.4	3.8	3.3	2.8	2.8	3.0	2.9	2.9	S&Ps	AAA	AAA
Effective interest rate (in percent) [5/]	3.7	2.4	2.2	2.0	1.6	1.4	1.3	1.2	1.3	Fitch	AAA	AAA
10-year bond yield	1.6	1.2	0.6	0.2	0.4	0.7	1.1	1.5	1.9			

Contribution to Changes in Public Debt

	Actual			Projections							
	2005-2013	2014	2015	2016	2017	2018	2019	2020	2021	cumulative	debt-stabilizing primary balance [10/]
Change in gross public sector debt	1.4	-2.5	-3.5	-2.6	-2.3	-2.3	-2.5	-2.2	-2.2	-14.2	
Identified debt-creating flows	0.1	-2.5	-3.1	-1.9	-1.8	-1.8	-2.0	-2.0	-1.9	-11.4	
Primary deficit	-0.7	-1.7	-1.9	-1.0	-1.0	-0.9	-1.0	-1.0	-1.0	-5.8	-0.9
Primary (noninterest) revenue and grants	43.2	44.2	44.3	44.1	44.2	44.2	44.1	44.1	44.1	264.9	
Primary (noninterest) expenditure	42.6	42.5	42.4	43.1	43.2	43.3	43.2	43.1	43.1	259.0	
Automatic debt dynamics [6/]	0.8	-0.7	-1.1	-0.9	-0.8	-0.9	-1.0	-1.0	-0.9	-5.6	
Interest rate/growth differential [7/]	0.8	-0.7	-1.1	-0.9	-0.8	-0.9	-1.0	-1.0	-0.9	-5.6	
Of which: real interest rate	1.7	0.4	0.1	0.4	0.1	-0.1	-0.2	-0.2	-0.2	-0.3	
Of which: real GDP growth	-0.9	-1.2	-1.2	-1.3	-0.9	-0.8	-0.8	-0.7	-0.7	-5.2	
Exchange rate depreciation [8/]	0.0	0.0	0.0	…	…	…	…	…	…	…	
Other identified debt-creating flows	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Privatization/Drawdown of Deposits (negative)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Please specify (2) (e.g., ESM and Euroarea loans)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Residual, including asset changes [9/]	1.3	-0.1	-0.5	-0.8	-0.6	-0.5	-0.4	-0.3	-0.3	-2.8	



Source: IMF staff.

1/ Public sector is defined as general government.

2/ Based on available data.

3/ Long-term bond spread over German bonds.

4/ Calendar-unadjusted growth rate.

5/ Defined as interest payments divided by debt stock (excluding guarantees) at the end of previous year.

6/ Derived as $[(r - \pi(1+g) - g + ae(1+r)]/(1+g+\pi+g\pi))$ times previous period debt ratio, with r = interest rate; π = growth rate of GDP deflator; g = real GDP growth rate; a = share of foreign-currency denominated debt; and e = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).

7/ The real interest rate contribution is derived from the numerator in footnote 5 as r - π (1+g) and the real growth contribution as -g.

8/ The exchange rate contribution is derived from the numerator in footnote 5 as ae(1+r).

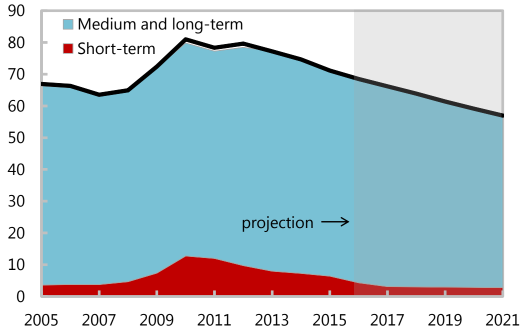
9/ Includes asset changes and interest revenues (if any). For projections, includes exchange rate changes during the projection period.

10/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

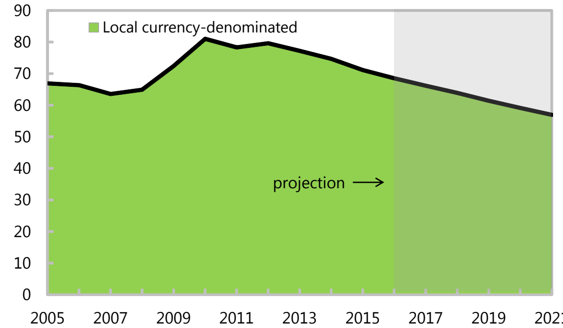
Germany Public DSA—Composition of Public Debt and Alternative Scenarios

Composition of Public Debt

By Maturity
(in percent of GDP)



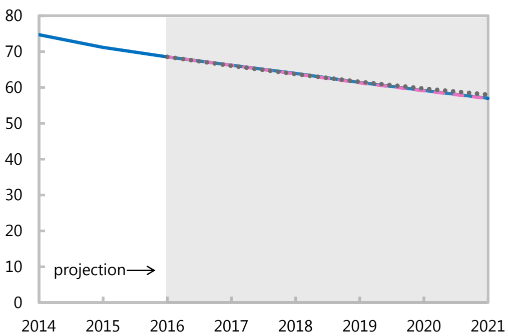
By Currency
(in percent of GDP)



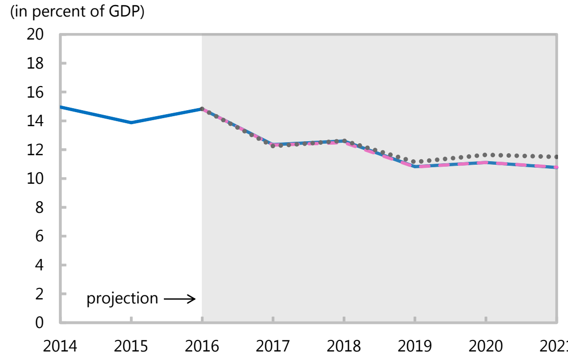
Alternative Scenarios

Baseline   Historical   Constant Primary Balance

Gross Nominal Public Debt
(in percent of GDP)



Public Gross Financing Needs
(in percent of GDP)



Underlying Assumptions
(in percent)

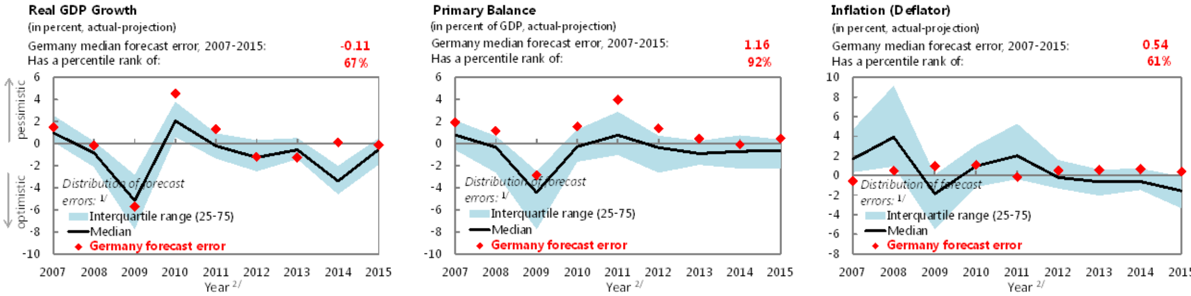
Baseline Scenario	2016	2017	2018	2019	2020	2021
Real GDP growth	1.8	1.3	1.3	1.3	1.2	1.2
Inflation	1.5	1.5	1.5	1.6	1.6	1.7
Primary Balance	1.0	1.0	0.9	1.0	1.0	1.0
Effective interest rate	2.0	1.6	1.4	1.3	1.2	1.3
Constant Primary Balance Scenario						
Real GDP growth	1.8	1.3	1.3	1.3	1.2	1.2
Inflation	1.5	1.5	1.5	1.6	1.6	1.7
Primary Balance	1.0	1.0	1.0	1.0	1.0	1.0
Effective interest rate	2.0	1.6	1.4	1.3	1.2	1.3

Historical Scenario	2016	2017	2018	2019	2020	2021
Real GDP growth	1.8	1.4	1.4	1.4	1.4	1.4
Inflation	1.5	1.5	1.5	1.6	1.6	1.7
Primary Balance	1.0	1.0	1.0	1.0	1.0	1.0
Effective interest rate	2.0	1.6	1.8	2.0	2.1	2.4

Source: IMF staff.

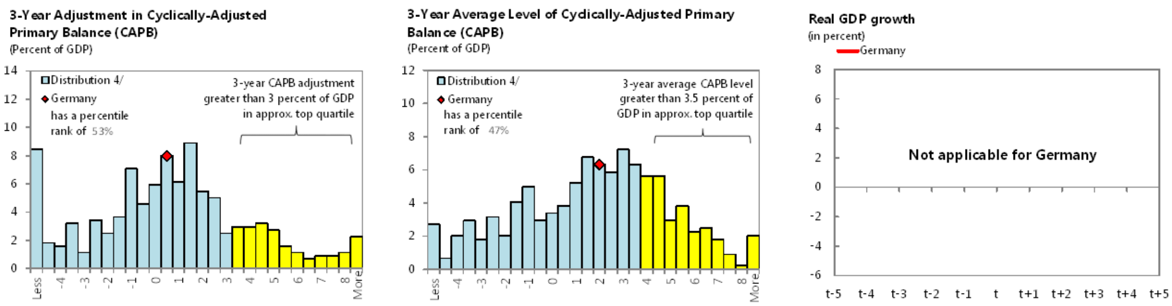
Germany Public DSA—Realism of Baseline Assumptions

Forecast Track Record, versus surveillance countries



Assessing the Realism of Projected Fiscal Adjustment

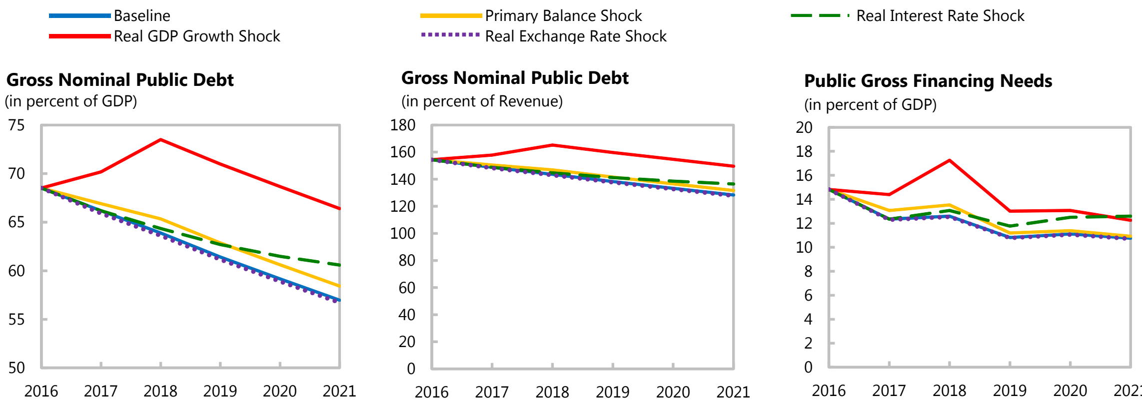
Boom-Bust Analysis 3/



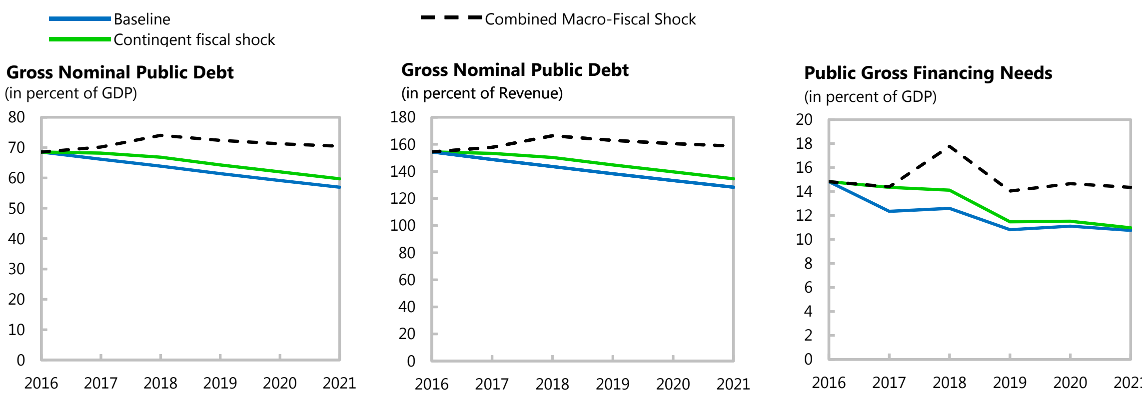
Source : IMF Staff.
1/ Plotted distribution includes surveillance countries, percentile rank refers to all countries.
2/ Projections made in the spring WEO vintage of the preceding year.
3/ Not applicable for Germany, as it meets neither the positive output gap criterion nor the private credit growth criterion.
4/ Data cover annual obervations from 1990 to 2011 for advanced and emerging economies with debt greater than 60 percent of GDP. Percent of sample on vertical axis.

Germany Public DSA—Stress Tests

Macro-Fiscal Stress Tests



Additional Stress Tests



Underlying Assumptions

(in percent)

	2016	2017	2018	2019	2020	2021
Primary Balance Shock						
Real GDP growth	1.8	1.1	1.3	1.3	1.2	1.2
Inflation	1.5	1.5	1.5	1.6	1.6	1.7
Primary balance	1.0	0.2	0.2	1.0	1.0	1.0
Effective interest rate	2.0	1.6	1.4	1.3	1.3	1.3
Real Interest Rate Shock						
Real GDP growth	1.8	1.1	1.3	1.3	1.2	1.2
Inflation	1.5	1.5	1.5	1.6	1.6	1.7
Primary balance	1.0	1.0	0.9	1.0	1.0	1.0
Effective interest rate	2.0	1.6	2.1	2.6	3.0	3.5
Combined Shock						
Real GDP growth	1.8	-1.5	-1.5	1.3	1.2	1.2
Inflation	1.5	0.8	0.8	1.6	1.6	1.7
Primary balance	1.0	-0.6	-2.3	1.0	1.0	1.0
Effective interest rate	2.0	1.6	2.2	2.7	3.1	3.6

	2016	2017	2018	2019	2020	2021
Real GDP Growth Shock						
Real GDP growth	1.8	-1.5	-1.5	1.3	1.2	1.2
Inflation	1.5	0.8	0.8	1.6	1.6	1.7
Primary balance	1.0	-0.6	-2.3	1.0	1.0	1.0
Effective interest rate	2.0	1.6	1.5	1.5	1.4	1.4
Real Exchange Rate Shock						
Real GDP growth	1.8	1.1	1.3	1.3	1.2	1.2
Inflation	1.5	1.9	1.5	1.6	1.6	1.7
Primary balance	1.0	1.0	0.9	1.0	1.0	1.0
Effective interest rate	2.0	1.6	1.4	1.3	1.2	1.3

Source: IMF staff.

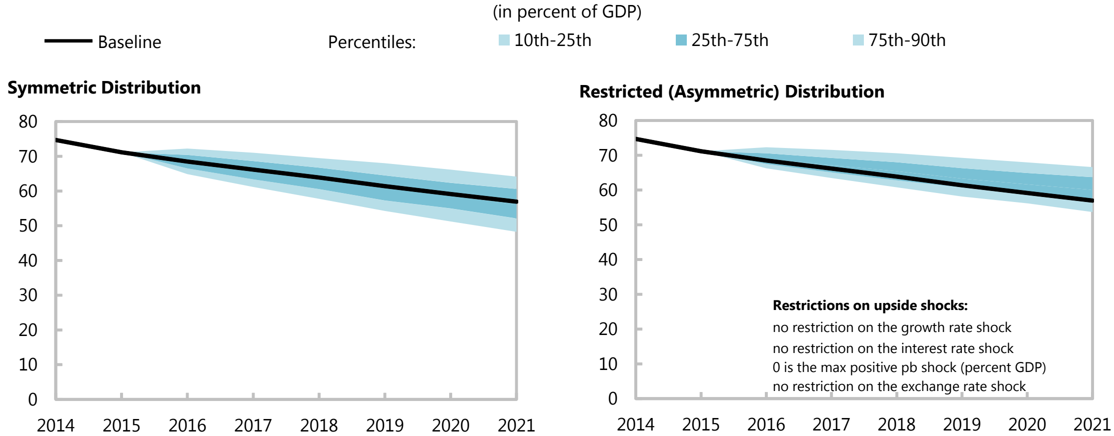
Germany Public DSA Risk Assessment

Heat Map

Debt level [1/]	Real GDP Growth Shock	Primary Balance Shock	Real Interest Rate Shock	Exchange Rate Shock	Contingent Liability shock
Gross financing needs [2/]	Real GDP Growth Shock	Primary Balance Shock	Real Interest Rate Shock	Exchange Rate Shock	Contingent Liability Shock
Debt profile [3/]	Market Perception	External Financing Requirements	Change in the Share of Short-Term Debt	Public Debt Held by Non-Residents	Foreign Currency Debt

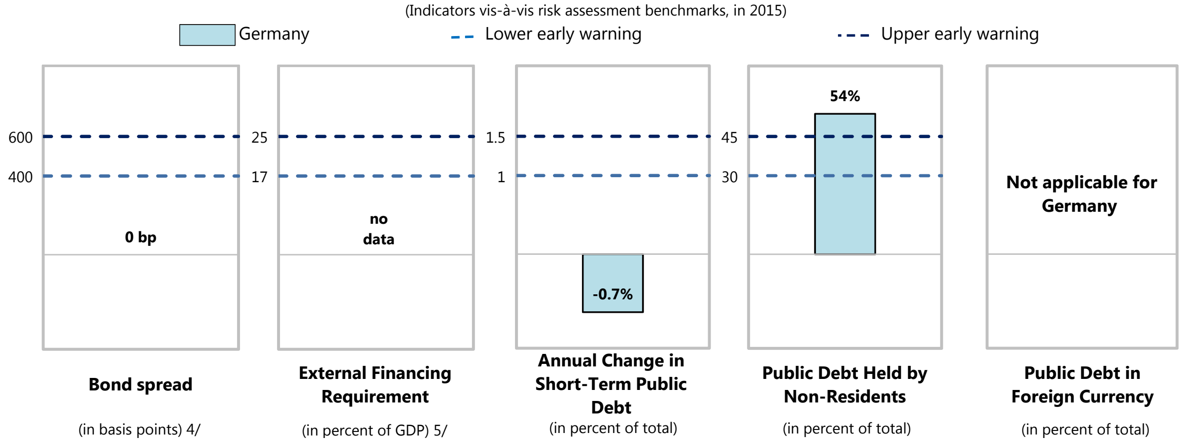
Evolution of Predictive Densities of Gross Nominal Public Debt

(in percent of GDP)



Debt Profile Vulnerabilities

(Indicators vis-à-vis risk assessment benchmarks, in 2015)



Source: IMF staff.

1/ The cell is highlighted in green if debt burden benchmark of 85% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

2/ The cell is highlighted in green if gross financing needs benchmark of 20% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

3/ The cell is highlighted in green if country value is less than the lower risk-assessment benchmark, red if country value exceeds the upper risk-assessment benchmark, yellow if country value is between the lower and upper risk-assessment benchmarks. If data are unavailable or indicator is not relevant, cell is white.

Lower and upper risk-assessment benchmarks are:

400 and 600 basis points for bond spreads; 17 and 25 percent of GDP for external financing requirement; 1 and 1.5 percent for change in the share of short-term debt; 30 and 45 percent for the public debt held by non-residents.

4/ Long-term bond spread over German bonds, an average over the last 3 months, 11-Mar-16 through 09-Jun-16.

5/ External financing requirement is defined as the sum of current account deficit, amortization of medium and long-term total external debt, and short-term total external debt at the end of previous period.

Annex II. Germany: External Sector Report Country Page

Foreign asset and liability position and trajectory	**Background**. Germany's positive net international investment position (NIIP) reached 49 percent of GDP at end-2015. The NIIP of financial corporations other than MFIs is large and positive (48 percent of GDP), while that of the general government is large and negative (35 percent of GDP), partly reflecting Germany's safe haven status. The NIIP is expected to reach 80 percent of Germany GDP and 3 percent of world GDP by 2021, as the projected CA surplus remains sizable in the medium term. The implicit rate of return on foreign assets has exceeded that on liabilities by 0.6 percent on average over 2010–15. Foreign assets are well diversified by instrument, and the exposure to emerging market is small. **Assessment**. Safe haven status and the strength of Germany's current external position limit risks.
Current account	**Background**. The current account averaged 6.1 percent of GDP over the last decade and reached 8.5 percent of GDP in 2015, a 1.2 pp. increase relative to 2014. Sixty percent of this increase is accounted for by the improvement in the gas and oil balance supported by lower commodity prices. The non-energy trade surplus grew by 0.2 percent of GDP owing to a depreciation of the REER and boosted automobile exports due to lower oil prices. After declining substantially in previous years, the surplus vis-à-vis the rest of the euro area expanded by 0.7 percent of GDP relative to 2014, mainly because the energy deficit with the Netherlands shrank. The bulk of the surplus reflects large saving-investment surpluses of non-financial corporations and households. The government contributed about ⅓ percent of GDP to the improvement in the current account in 2015. **Assessment**. The cyclically-adjusted current account balance stood at 8.8 percent of GDP in 2015, which is 3–6 percentage points of GDP stronger than the value implied by fundamentals and desirable policies. Staff assesses the norm at 2½–5½ percent of GDP. The norm implied by the EBA model is 4.9 percent. 1/ The staff assessment departs from the EBA norm to incorporate a more favorable demographic outlook reflecting new scenarios from the German statistical agency as well as staff assumptions on the impact of the recent refugee wave. These factors bring down the assessed CA norm by 0.9 percentage points. The sensitivity of the norm to demographic factors, and uncertainties regarding to the evolution of these factors, explain the wider range around the assessed CA norm. 2/
Real exchange rate	**Background**. By end of 2015, the CPI based real exchange rate had depreciated in effective terms by 5.3 percent from its 2014 average primarily because of nominal bilateral depreciations vis-à-vis the USD and the RMB. These exchange rate movements are related to the monetary tightening in the U.S. and the implementation and expansion of quantitative easing in the euro area. As of April 2016, the REER has appreciated 1.3 percent over its 2015 average. **Assessment**. Staff's assessment for 2015 is of a REER undervaluation of 10–20 percent. The EBA REER Level model yields an undervaluation of about 22 percent. The undervaluation implied by the CA regression model using standard trade elasticities is 10–15 percent. 3/
Capital and financial accounts: flows and policy measures	**Background**. In 2015, net portfolio and other investment flows constituted about ½ and ⅓ of the capital and financial account balance, respectively. On a regional basis, about 2/3 of the net outflows were toward European countries and 1/3 toward the Americas (mostly the U.S.), with small net inflows from emerging countries and offshore centers. Net direct foreign investment declined mainly reflecting an increase in flows into Germany. The stock of Germany's net (Target2) claims on the Eurosystem went down from a peak of €749 billion in August 2012 to €603 billion in April 2016. **Assessment**. Reduced euro area financial stress has led to the resumption of private capital outflows and a declining exposure to the Eurosystem, though the latter remains well above pre-crisis levels.
FX intervention and reserves level	**Background**. The euro has the status of global reserve currency. **Assessment**. Reserves held by Euro area countries are typically low relative to standard metrics. The currency is freely floating.
Technical Background Notes	1/ The rapid aging of the population contributes 3.9 percentage points to the estimated EBA CA norm of 4.9 percent of GDP. Most of the EBA-estimated gap for 2015 reflects the regression's residual rather than gaps in the policies included in the EBA model. 2/ In this separate assessment, staff assumes projected refugee inflows unchanged in other countries, including in large absorbers of refugee flows in Europe (such as Sweden and Austria). 3/ The EBA REER Index model has an unusually poor fit for Germany, predicting a depreciating trend that has not occurred. The result for 2015 is an estimate of *over*valuation (of 2.7 percent) that has been discarded from the assessment as implausible, including in light of the assessment that the CA is too strong.

Overall Assessment

Overall Assessment:

Germany's external position in 2015 was substantially stronger than implied by medium-term fundamentals and desirable policy settings. The current account gap has widened relative to 2014 reflecting the delayed response of consumption to the windfall from lower energy prices, and REER depreciation. Current account surplus modestly narrowed in early 2016 together with small appreciation of the REER. These developments do not alter the overall assessment of 2015.

Staff projects some gradual rebalancing in the medium run as the terms of trade windfall is gradually spent, energy prices partially recover, private investment keeps strengthening, and stronger wage growth relative to euro area trading partners contributes to realign price competitiveness.

Potential policy responses:

Fiscal resources available within the fiscal rules should be used to boost public investment and growth-enhancing structural reforms. This would raise Germany's potential output and generate positive demand spillovers to the rest of the euro area while reducing the German current account surplus.

Annex III. Risk Assessment Matrix

Source of Risks	Relative Likelihood	Impact	Policy response
Risks to the economic outlook			
I. Slowdown of external demand, including because of protracted slower growth in key advanced and emerging economies or negative growth surprises in China. With its high degree of trade openness, Germany is especially susceptible to fluctuations in global demand.	M	M	**Let automatic stabilizers work. Consider a discretionary fiscal expansion to the extent allowed by the fiscal rules. If the output gap widens significantly, depending on the size and nature of the shock to the economy, invoking the escape clause under the national debt brake rule could be appropriate to support German growth.**
II. Tighter or more volatile global financial conditions, as investors reassess underlying risk and respond to unanticipated changes in growth and financial fundamentals in large economies and Fed policy rate path. This scenario may give rise to domestic financial risks and second round adverse spillovers because of the globally interconnected financial sector.	M	L	
III. Reassessment of regional sovereign risk. Financial stress in the euro area (EA) could re-emerge triggered by policy uncertainty, faltering reforms, or political unrest, as EA institutional weaknesses remain.	M	M	
IV. Erosion of confidence in the European project across parts of Europe. Some European countries renegotiate the terms of their membership to the European Union, or exit the Union altogether, leading to periods of financial volatility, higher trade barriers, and lack of policy coordination.	M	M	
V. Political backlash against the government's refugee policy could help the main far right party build on its large gains in recent regional elections, destabilize the ruling coalition and dent confidence.	L	L	
Risks to the financial sector			
VI. Excessive risk-taking associated with the low interest rate environment. The housing market strength in most German urban areas could continue and real estate assets could become overvalued. Faced with falling net interest margin banks may be tempted to adopt (risky) search-for-yield strategies. In a context of persistently low interest rates, some life insurers may not be able to pay guaranteed yields to policyholders and may become distressed. The shortfall would likely remain a very small share of GDP but may have a negative reputational impact on the financial sector as a whole.	L	M	**Take precautionary measures now by strengthening the macroprudential framework and bank supervision. Keep pushing large banks to reduce their high leverage.** **Supervisors should make full use of the additional early intervention powers granted to them by the 2014 life insurance reform law to ensure prudent behavior by the industry.**
VII. Distress in a major financial institution One of Germany's systemic financial institutions may become distressed if the sector is confronted with significant shocks. This could trigger a systemic event given the interconnectedness and the importance of German SIFIs as global shock emitters.	L	H	**The authorities should make sure that the resolution of a major financial institution does not contaminate the rest of the financial system and ensure ample liquidity provision to the financial system.**

Annex IV. Authorities' Response to Past IMF Policy Recommendations

IMF 2015 Article IV Recommendations	Authorities' Response
Fiscal Policy	
• Step up investment addressing weaknesses in public infrastructure to strengthen potential output and domestic demand. To facilitate this process, put in place new institutions that enable better planning and coordination of public investment at the local level.	• Plans for additional public investment (excluding military investment) of some €22 billion (0.7 percent of GDP) have been announced so far over the past two years, taking advantage of a better-than-expected fiscal position. • By the end of this year Germany's PPP advisory agency *Partnership Deutschland*, will be restructured, rendering it more effective to provide advisory support for municipal investment, both for PPP and conventional procurement. • Discussions are ongoing to create a federal transportation agency. Progress has however been slow.
Financial Sector Policy	
• Expand the macroprudential toolkit to better address potential future excesses in the housing sector • Ensure that life insurance companies maintain sufficient capital buffers to withstand a prolonged period of low interest rates.	• Specific instruments that target excessive leverage and debt service burden—originating in the real estate lending business—have been proposed by the Financial Stability Committee. Legislation is currently being drafted. • Supervisors have intensified the monitoring of vulnerable life insurers. • For progress on the implementation of outstanding FSAP recommendations see FSSA
Structural Reforms	
• Enhance competition to foster a more productive services sector. • Reduce disincentives for women to work full time as a way to mitigate the adverse effects of an aging population on labor supply.	• No significant competition-enhancing reform has taken place in the services sector. In the context of the EC-led transparency exercise in the area of regulated professions, an action plan was submitted to the EC in January 2016. Abiding by the fee schedule of tax advisors will cease to be compulsory. There were no new initiatives to promote full time attachment of women to the labor force since the last Article IV consultation. However, in January 2015, federal funds to support investment in the expansion and quality of childcare rose by EUR 0.5 billion (to EUR 1 billion), and the Länder will receive EUR 0.1 billion in 2017 and 2018 for the same purpose.

INTERNATIONAL MONETARY FUND
COMMUNICATIONS DEPARTMENT

Appendix I. Draft Press Release

Press Release No. 16/xx
FOR IMMEDIATE RELEASE
June xx, 2016

International Monetary Fund
700 19th Street, NW
Washington, D. C. 20431 USA

IMF Executive Board Concludes the 2016 Article IV Consultation with Germany

On [June 24, 2016], the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation[1] with Germany.

The growth momentum has remained steady as strong domestic demand has offset weak foreign demand. Private consumption growth has been supported by the persistently strong labor market and lower energy prices, while public consumption and investment have also been buoyant. Core inflation has been low and stable around 1 percent. The current account surplus has continued to widen significantly, reaching 8.5 percent of GDP in 2015, reflecting lower commodity prices and currency effects. The fiscal stance was neutral last year.

Credit growth, long subdued, has picked up, while housing prices have kept trending up in the context of a slow supply response to surging housing demand. The banking sector faces multiple challenges, which translate into low profitability. Negative interest rates erode profits from retail banking, the aggregate cost-to-income ratio is high in international comparison, while technological changes and the new regulatory environment—which is still being implemented—require business model adaptation. Low interest rates, if protracted, would also weaken life insurers' ability to meet guaranteed commitments.

Looking forward, domestic demand is expected to keep underpinning the moderate growth momentum. A sizable fiscal expansion, the recent further ECB monetary stimulus, and still supportive energy prices should continue to offset the weakness in some key trading partners. GDP is projected to grow by [1.7] percent this year and [1.5] percent next year. A small positive output gap should open up which, together with the effects of recent ECB policy actions, should very gradually push up core and headline inflation towards 2 percent. However, growth over the medium term is expected to decline against the backdrop of a still uncertain global outlook, a population aging fast, and slow progress on structural reforms.

[1] Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board.

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Executive Board Assessment[2]

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[2] At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summings up can be found here: http://www.imf.org/external/np/sec/misc/qualifiers.htm.

Germany: Selected Economic Indicators, 2014–18

	2014	2015	2016 (Projections)	2017 (Projections)
Output				
Real GDP growth (%)	1.6	1.4	1.7	1.5
Total domestic demand growth (%)	1.3	1.4	2.3	1.8
Output gap (% of potential GDP)	-0.2	-0.1	0.2	0.4
Employment				
Unemployment rate (%, ILO)	5.0	4.6	4.3	4.5
Employment growth (%)	0.9	0.8	1.3	0.6
Prices				
Inflation (%)	0.8	0.1	0.4	1.5
General government finances				
Fiscal balance (% of GDP)	0.3	0.6	-0.1	0.1
Revenue (% of GDP)	44.6	44.6	44.4	44.5
Expenditure (% of GDP)	44.3	44.0	44.5	44.4
Public debt (% of GDP)	74.7	71.2	68.5	66.2
Money and credit				
Broad money (M3) (end of year, % change) 1/	4.9	9.2		
Credit to private sector (% change)	0.6	2.4		
10 year government bond yield (%)	1.2	0.6		
Balance of payments				
Current account balance (% of GDP)	7.3	8.5	8.2	7.7
Trade balance (% of GDP)	7.8	8.7	8.5	8.4
Exports of goods (% of GDP)	38.2	39.0	38.7	39.3
volume (% change)	4.2	5.0	3.0	4.0
Imports of goods (% of GDP)	30.5	30.3	30.2	30.9
volume (% change)	4.7	5.8	5.2	5.0
FDI balance (% of GDP)	-2.7	-1.9	-0.7	-0.7
Reserves minus gold (billions of US$)	62.3	58.5		
External Debt (% of GDP)	154.5			
Exchange rate				
REER (% change)	0.5	-5.3		
NEER (% change)	0.8	-4.8		
Real effective rate (2005=100) 2/	96.0	90.9		
Nominal effective rate (2005=100) 3/	102.0	97.1		

Sources: Deutsche Bundesbank, Eurostat, Federal Statistical Office, Haver Analytics, and IMF staff calculations.
1/ Reflects Germany's contribution to M3 of the euro area.
2/ Real effective exchange rate, CPI based, all countries.
3/ Nominal effective exchange rate, all countries.