INTERNATIONAL MONETARY FUND

IMF Country Report No. 15/187

GERMANY

July 2015

2015 ARTICLE IV CONSULTATION—PRESS RELEASE; STAFF REPORT; AND STATEMENT BY THE ALTERNATE EXECUTIVE DIRECTOR FOR GERMANY

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2015 Article IV consultation with Germany, the following documents have been released and are included in this package:

- A **Press Release** summarizing the views of the Executive Board as expressed during its July 10, 2015 consideration of the staff report that concluded the Article IV consultation with Germany.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on July 10, 2015 following discussions that ended on May 11, 2015 with the officials of Germany on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on June 22, 2015.
- An **Informational Annex** prepared by the IMF staff.
- A **Staff Statement** updating information on recent developments.
- A **Statement by the Alternate Executive Director** for Germany.

The documents listed below have been or will be separately released:

Selected Issues

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International Monetary Fund
Washington, D.C.

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Press Release No.15/337
FOR IMMEDIATE RELEASE
July 15, 2015

International Monetary Fund
Washington, D.C. 20431 USA

IMF Executive Board Concludes Article IV Consultation with Germany

On July, 10, 2015, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation[1] with Germany.

The ongoing upturn is benefiting from the euro depreciation and lower energy prices, and is underpinned by a healthy fiscal position and sound corporate and household balance sheets. Employment growth has been robust, supported by strong immigration, and the unemployment rate hit another post-reunification low at 4.7 percent. The oil price drop brought inflation temporarily close to zero, which has contributed to lift real wage growth to a twenty-year high. The current account surplus reached a new high in 2014, as the oil and gas trade deficit narrowed. Fiscal policy was mildly contractionary in 2014, and it is expected to turn moderately expansionary in 2015.

While credit conditions remain very favorable, credit growth has been tepid, reflecting low demand despite a more dynamic housing market. The ECB Comprehensive Assessment revealed only minor shortcomings in large banks' loan classification or provisioning. The persistent low interest rate environment is putting pressure on banks' profitability and life insurers' solvency.

The current moderate growth momentum is expected to continue as robust real wages buoy private consumption and euro depreciation buttresses exports, opening the way for a recovery in machinery and equipment investment. All in all, GDP is expected to grow by 1.6 percent this year and 1.7 percent next year. The output gap should close this year and remain positive but small in the medium term. Together with a better anchoring of expectations because of the ECB quantitative easing this should gradually push up core and headline inflation. Growth in the medium term, however, is expected to remain constrained by the still weak international environment and fast approaching adverse demographic developments.

[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.

Executive Board Assessment[2]

Executive Directors commended the German authorities for their prudent economic management, which helped consolidate sound balance sheets, a healthy fiscal position, and a historically low unemployment rate. Together with lower energy prices, a weaker currency, and accommodative financial conditions, these achievements are supporting the ongoing economic upturn. Directors observed that medium–term growth prospects are subdued in the context of a still weak international environment and adverse demographic trends, while the current account surplus reached another historical high.

Directors emphasized that policies should aim at bolstering medium–term growth while generating much needed positive demand spillovers and reducing external imbalances. In this regard, Directors welcomed recent initiatives to step up public investment in infrastructure and supported the creation of new institutions to improve planning and coordination at the local level and facilitate public–private partnerships. Most Directors, however, saw scope for even more ambitious action to fully address estimated needs within the available fiscal space and contribute to global rebalancing, particularly in the euro area. Some other Directors emphasized the need to preserve fiscal buffers or were concerned about the impact of administrative capacity constraints on the quality of investment.

Directors encouraged further efforts to reduce barriers to competition in the services sector, particularly in the area of professional services, which would lead to higher productivity and lower prices for users. Directors welcomed progress on the ambitious program to phase out nuclear energy and transition to renewable energy sources, but noted that several challenges remain in containing costs for users, as well as securing conventional back-up capacity and grid expansion. Faster progress on addressing these challenges would support domestic private investment.

Directors observed that, despite record immigration, rapid population aging would have increasingly adverse effects on labor supply and potential growth after 2020. This calls for stronger policies to spur female labor force participation, including by stepping up the provision of high-quality child care services (especially after-school programs) and lowering high marginal tax rates on secondary earners.

Directors welcomed German banks' continued strengthening of their capital position following the Single Supervisory Mechanism's Comprehensive Assessment last year. This is particularly important in view of the multiple challenges facing parts of the banking system such as structurally low profitability, lingering crisis legacies, litigation costs, and the need to adjust business models to the post-crisis regulatory environment. Close cooperation and coordination among the supervisory institutions is key in this context.

Directors emphasized the need for continued close monitoring of the housing market and the life insurance sector, where persistently low interest rates may give rise to financial vulnerabilities. In this regard, they supported enhancing the macroprudential toolkit through

[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.

instruments that curb loan demand and address potential future excesses in the housing sector. They also highlighted the need to make full use of the new early intervention powers granted to supervisors by the Life Insurance Reform Act passed last year so as to ensure that life insurance companies maintain sufficient capital buffers.

Germany: Selected Economic Indicators, 2012-16

Population (million, 2014)	81.1	Per capita GDP ($, 2014)		47,615

				Projections	
	2012	2013	2014	2015	2016
Output					
Real GDP growth (%)	0.6	0.2	1.6	1.6	1.7
Total domestic demand growth (%)	-0.8	0.8	1.4	1.7	1.7
Output gap (% of potential GDP)	0.4	-0.6	-0.3	0.0	0.3
Employment					
Unemployment rate (%, ILO)	5.4	5.2	5.0	4.8	4.7
Employment growth (%)	1.0	0.9	0.9	0.6	0.4
Prices					
Inflation (%)	2.1	1.6	0.8	0.4	1.3
General government finances					
Fiscal balance (% of GDP)	0.1	0.1	0.6	0.5	0.4
Revenue (% of GDP)	44.3	44.5	44.6	44.4	43.8
Expenditure (% of GDP)	44.2	44.3	44.0	43.8	43.5
Public debt (% of GDP)	79.3	77.1	74.7	70.6	67.9
Money and credit					
Broad money (M3) (end of year, % change) 1/	7.1	2.6	4.8		
Credit to private sector (% change)	1.3	0.8	0.6		
10 year government bond yield (%)	1.6	1.6	1.2		
Balance of payments					
Current account balance (% of GDP)	6.8	6.5	7.6	8.4	7.9
Trade balance (% of GDP)	7.1	7.4	7.9	8.6	8.2
Exports of goods (% of GDP)	39.1	38.6	38.7	39.6	40.4
volume (% change)	269.1	130.7	419.9	407.9	445.8
Imports of goods (% of GDP)	31.9	31.2	30.8	31.1	32.2
volume (% change)	-81.5	201.3	445.8	601.1	516.8
FDI balance (% of GDP)	-1.3	-0.3	-2.9	-0.6	-0.6
Reserves minus gold (billions of US$)	67.4	67.4	62.3		
External Debt (% of GDP)	170	155	159		
Exchange rate					
REER (% change)	-0.9	3.4	-2.4		
NEER (% change)	-0.8	3.4	-1.7		

Sources: Deutsche Bundesbank, Eurostat, Federal Statistical Office, Haver Analytics, and IMF staff estimates and projections.

1/ Reflects Germany's contribution to M3 of the euro area.

INTERNATIONAL MONETARY FUND

GERMANY

STAFF REPORT FOR THE 2015 ARTICLE IV CONSULTATION

June 22, 2015

KEY ISSUES

Context:

- *Growth is benefiting from lower energy prices and euro depreciation, and the labor market is strong.*
- *The external position remains substantially stronger than implied by medium-term fundamentals as the current account surplus reached another historical high.*
- *The fiscal position is healthy, corporate and household balance sheets are sound.*
- *Low interest rates are compounding chronically weak bank profitability and hurting life insurers' solvency.*
- *The population is aging fast despite record immigration, which will increasingly harm growth prospects after 2020.*

Policy priorities: *Further progress is urgently needed to raise potential growth while generating beneficial spillovers to the rest of the euro area and lowering the large current account surplus:*

- *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.*
- *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.*
- *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.*

Approved By
Mahmood Pradhan (EUR) and Tamim Bayoumi (SPR)

Discussions took place in Berlin, Bonn, and Frankfurt during April 29-May 11. The staff team comprised Enrica Detragiache (head), Joana Pereira and Jérôme Vandenbussche (all EUR), and Emine Boz (RES). The team was supported from headquarters by Mariza Arantes, Morgan Maneely, and Jean-Marc Natal (all EUR). Selim Elekdag (MCM) and Dirk Muir (RES) contributed to the analytical work.

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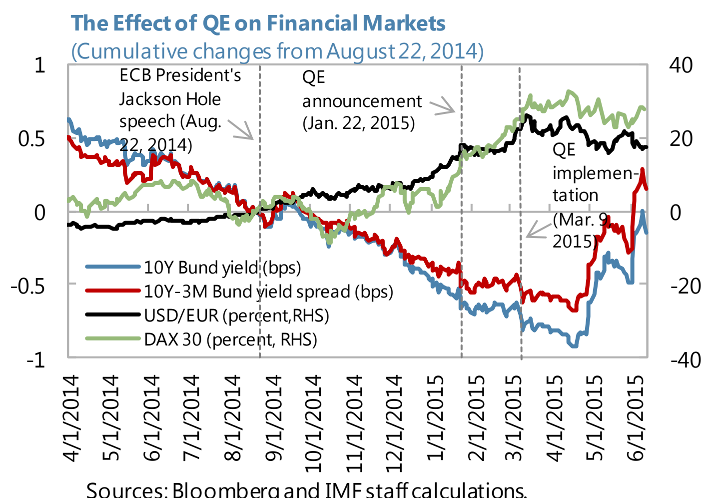
RECENT ECONOMIC DEVELOPMENTS AND OUTLOOK

A. The Economy Remains on an Uptrend

1. **An upturn is under way as the economy is enjoying the benefits of the euro depreciation and lower energy prices**. The anticipation of the ECB's quantitative easing (QE) significantly lowered interest rates and term spreads, weakened the euro, and, together with the drop in energy prices, helped overcome the unexpected slowdown of mid-2014 (Figure 1). By the end of last year and into the first quarter of this year, investment picked up again while consumption was supported by above-trend real disposable income growth. The latter benefited from robust real wage growth, a strong labor market, and the positive demand effects of the pension reform implemented last year (higher pensions for some mothers, and earlier statutory retirement for some categories of workers). The regained domestic demand momentum boosted imports, while the weaker euro during the second half of the year helped strengthen export performance in spite of a slowdown in emerging markets.



Sources: Bloomberg and IMF staff calculations.

2. **The oil price drop brought inflation temporarily close to zero, contributing to lift real wage growth to a twenty-year high.** Core inflation is low and stable at around 1 percent, while real compensation per employee increased by 1.7 percent in 2014 (Figure 2). Employment kept growing strongly—though the trend in total hours worked has been less dynamic—and the unemployment rate hit another post-reunification low at 4.7 percent, while Germany became the second largest migration destination in the world after the U.S. last year. Recent collective agreements and ongoing wage negotiations suggest continued significant real wage growth this year. The new minimum wage, introduced on January 1, 2015 and implemented over two years, has had no visible impact on total employment so far.

3. **The current account surplus continued to grow in 2014, reaching 7.6 percent of GDP.** The narrowing of the oil and gas trade deficit was the main contributor to the expansion in the surplus (Figure 3), which was the largest in the world in USD terms. The surplus vis-à-vis euro area economies (Greece, Ireland, Italy, Portugal, Spain) with high borrowing spreads during the 2010-11 sovereign debt crisis was stable after declining substantially during the crisis. Regarding

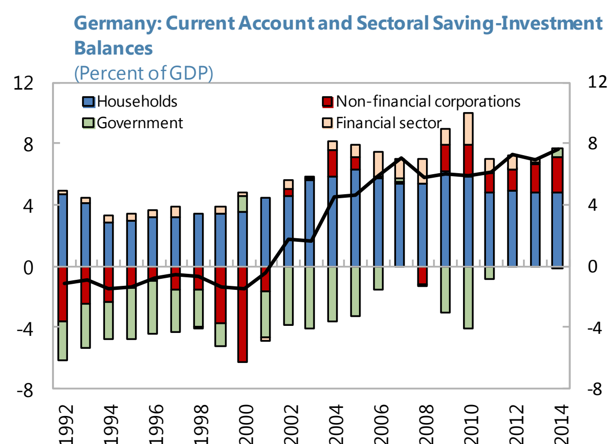
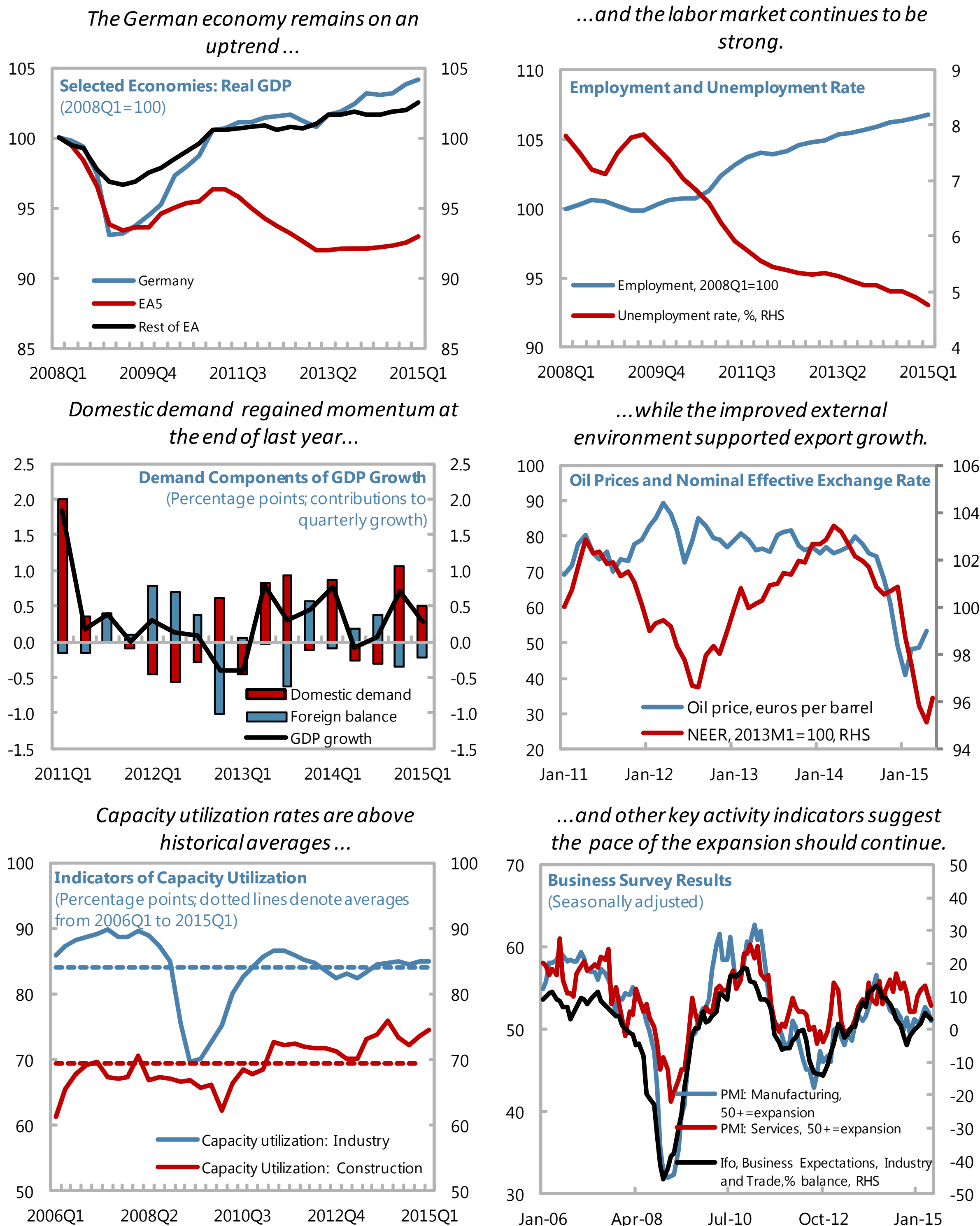


Figure 1. Germany: Growth Outlook

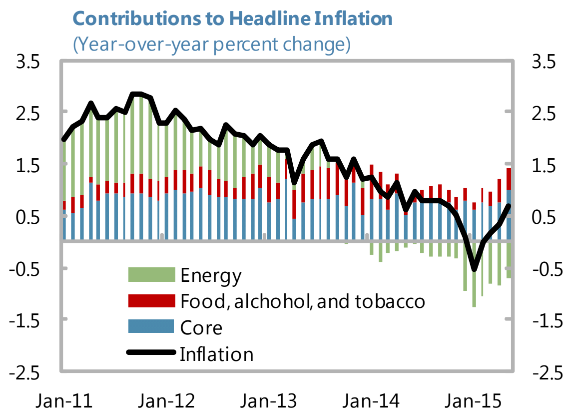


Source: Destatis, Haver Analytics, IFO Institute, INS, IMF *World Economic Outlook*, Markit, and IMF staff calculations.

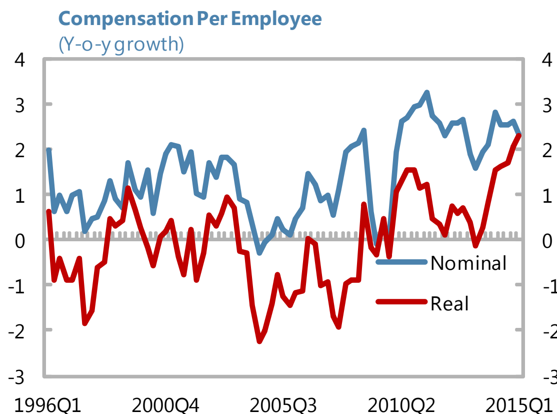
Note: EA5=Euro area economies (Greece, Ireland, Italy, Portugal, Spain) with high borrowing spreads during the 2010-11 sovereign debt crisis.

Figure 2. Germany: Prices and Labor Market

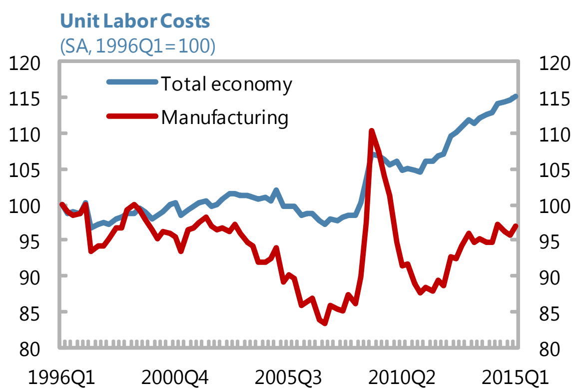
Lower energy prices have brought inflation down...



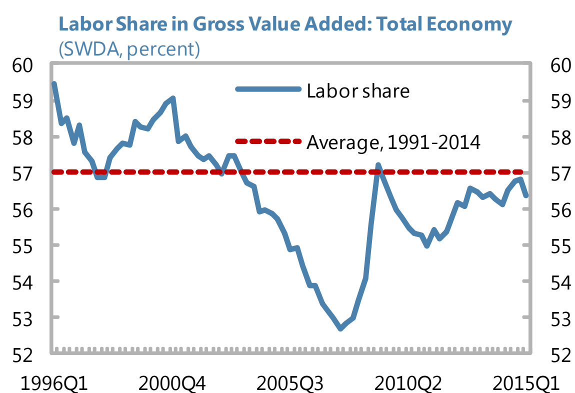
... while nominal wage growth has remained steadv...



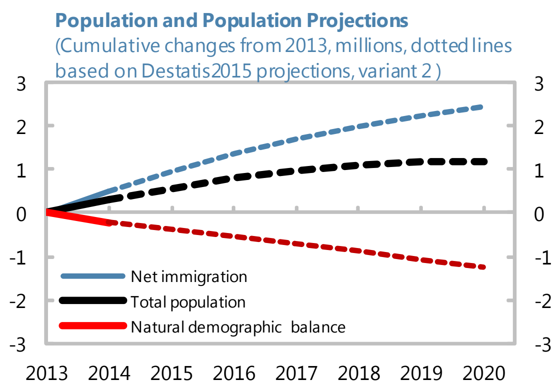
...which has kept pushing up unit labor costs...



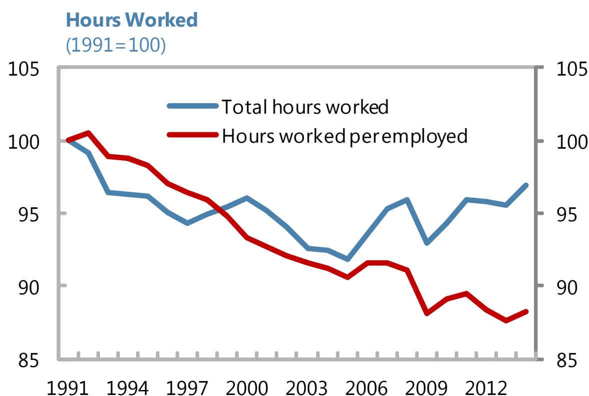
... and helped normalize the labor share.



Continued strong immigration over the next few years could counter the negative natural demographic balance...



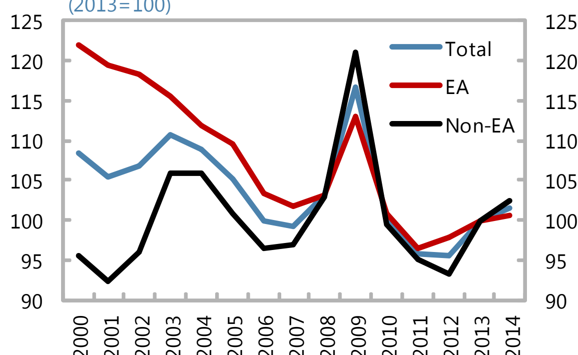
...while the secular decline in hours worked per employed has slowed down.



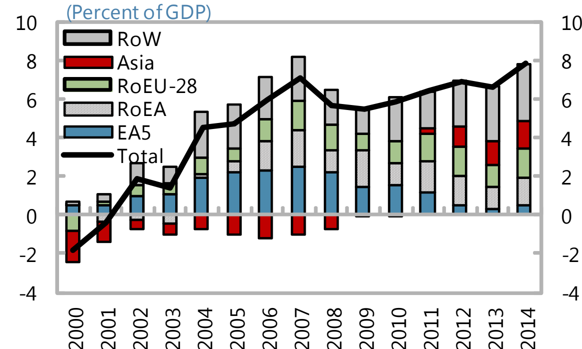
Source: Bundesbank, Federal Statistical Office, Eurostat, Haver Analytics, and IMF staff calculations.

Figure 3. Germany: Balance of Payments

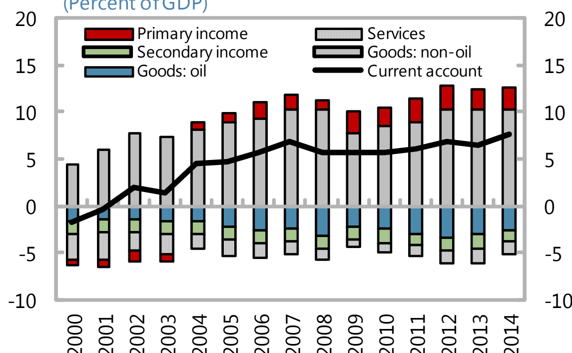
Consistent with competitiveness gains vis-à-vis EA countries after the launch of the euro...



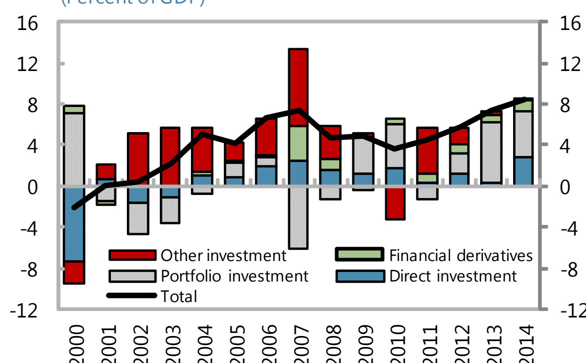
...the current account improvement until the financial crisis was with respect to EA countries.



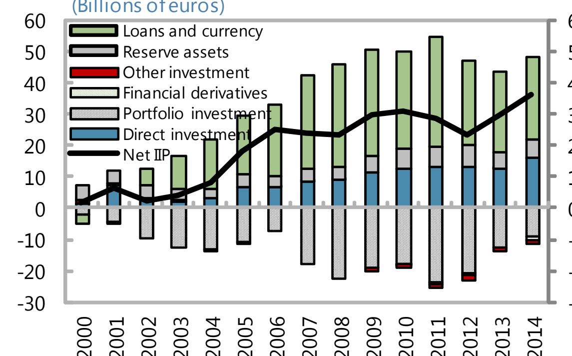
The current account improvement in 2014 was mostly driven by the oil and gas trade balance.



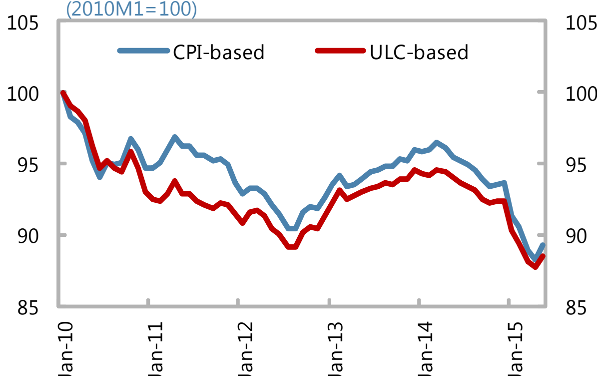
Portfolio investment continued to be the largest item in the capital and financial account in 2014...



...contributing significantly to the improvement in the NIIP.



REER depreciation since mid-2014 is likely to put upward pressure on the current account in 2015.



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.

saving-investment balances, non-financial corporations and the general government increased their surpluses in 2014 relative to 2013. In fact, the surplus of non-financial corporations, at 2.2 percent of GDP, reached its highest level since reunification. The CPI-based real effective exchange rate was roughly stable in 2014, but has since depreciated by 6 percent from its 2014 average primarily because of nominal depreciation vis-à-vis the dollar and the renminbi. The net international investment position (NIIP) continued to grow in 2014, reflecting stronger direct and portfolio investment positions. Yet, monetary and financial institutions cut back their net foreign lending position, continuing a trend observed since 2009.

4. **Fiscal policy was mildly contractionary in 2014, while it is expected to turn mildly expansionary in 2015.** The government presented a balanced federal budget for 2015, one year ahead of schedule (Figure 4). The general government surplus rose to 0.6 percent of GDP in 2014—a structural improvement of 0.3 percent relative to 2013—owing to lower-than-expected interest payments and one-off revenue items. A negative interest rate–growth rate differential pushed the debt ratio further down, to 74.7 percent of GDP. The structural fiscal position for 2015 is expected to remain comfortably within the boundaries set by the constitutional debt brake rule at the federal level and the European Medium-Term Objective (MTO) at the general government level (maximum structural deficits of 0.35 percent and 0.5 percent of GDP, respectively).

5. **Credit growth remains tepid despite record-low interest rates.** The yield on 10-year bunds, after reaching a trough of 0.1 percent in mid-April, recently rebounded sharply as market volatility suddenly jumped—possibly reflecting lower market liquidity—but remains very low from a historical perspective, with negative yields extending up to the 3-year maturity. Already historically low bank lending rates have fallen further with the anticipation of QE (Figure 5), while stock prices have accelerated sharply. So far, however, credit growth has remained subdued, especially in the corporate sector, where companies can finance a large share of their investment needs from retained earnings and cash reserves, resulting in low credit demand. A more dynamic housing market (especially in some "hot spots") over the past few years has been accompanied by tepid aggregate mortgage lending growth, although there are signs of acceleration in recent months.

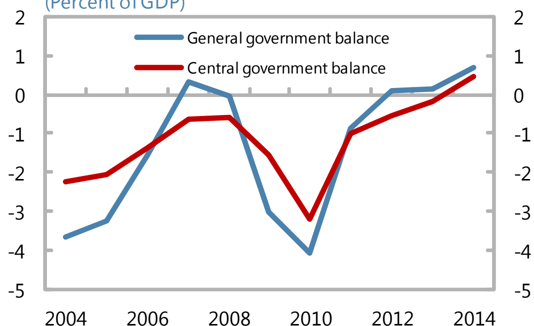
6. **The Single Supervisory Mechanism's (SSM) Comprehensive Assessment revealed only minor shortcomings in loan classification or provisioning but showed relatively low capital quality and leverage ratios in the large-bank segment of the banking sector.** As expected, the higher provisioning needs identified by the asset quality review were concentrated in shipping finance and commercial real estate portfolios. All assessed banks, except a relatively small one, passed the stress tests. This very positive outcome was partially due to the fact that some types of capital that are being phased out under the new European regulation were still counted as eligible for the exercise.[1] Furthermore, while banks' leverage ratio is currently not subject to EU-wide regulation, SSM disclosures showed that many of the largest German banks had leverage ratios close to or below 4 percent (Figure 6), a level emerging as the new regulatory minimum in a growing number of European countries (Netherlands, Switzerland, U.K.).

[1] According to stress test results published by the European Banking Authority, a total of five German banks would have had a capital shortfall in the adverse scenario under a fully loaded (as opposed to phase-in) common equity Tier 1 metric.

Figure 4. Germany: Fiscal Developments and Outlook

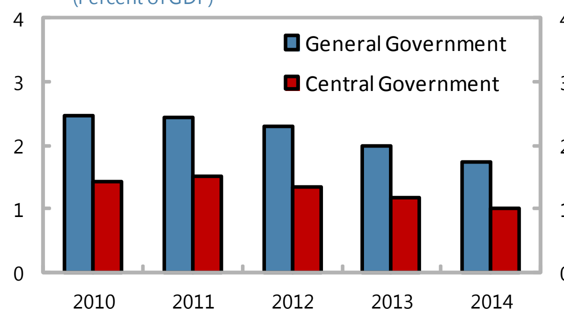
In 2014 the central government ran the first surplus in over a decade…

Central and General Government Balances
(Percent of GDP)



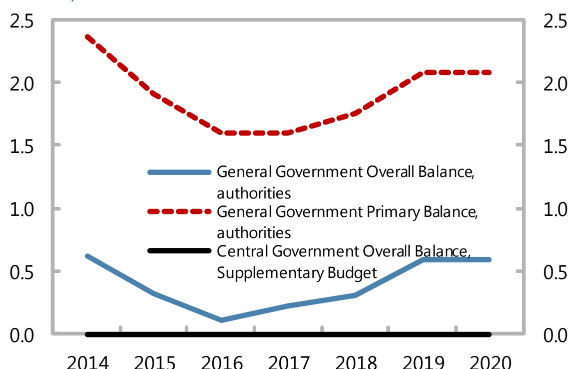
…in part due to the declining interest bill.

Interest Payments of the Central and General Government
(Percent of GDP)



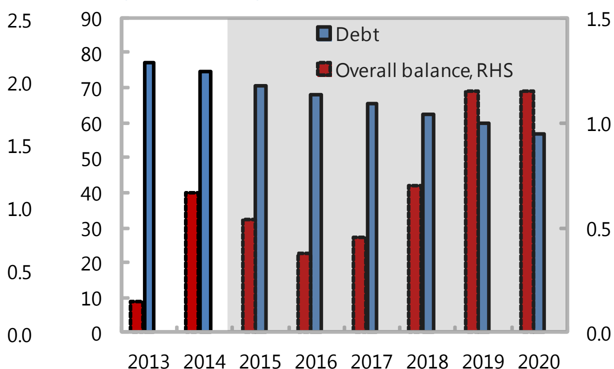
The 2015 Federal Budget anchors future fiscal policy on a balanced budget…

General Government Fiscal Plans
(percent of GDP)



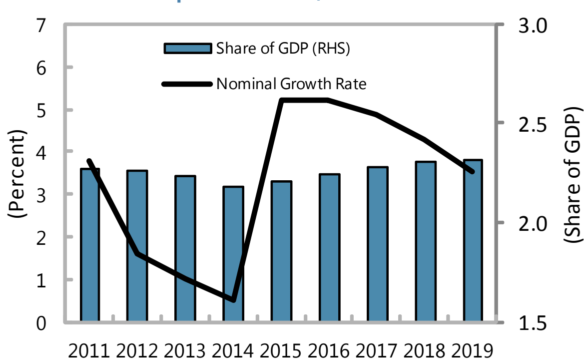
…which, under staff's macroeconomic outlook, would drive public debt under 60 percent of GDP by 2020.

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



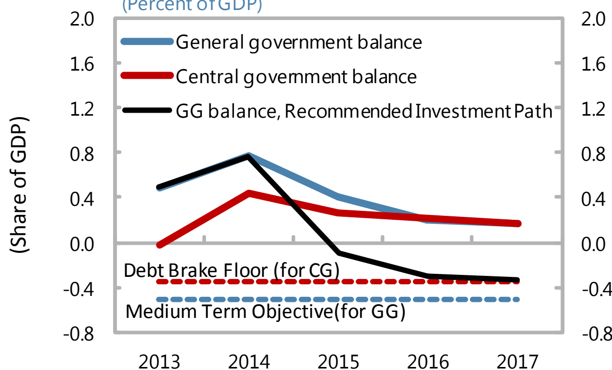
The government has increased public investment commitments for the medium run…

Gross Fixed Capital Formation, General Government



…but fiscal space remains for a more ambitious plan through the end of this legislature.

Fiscal Structural Balances Outlook
(Percent of GDP)

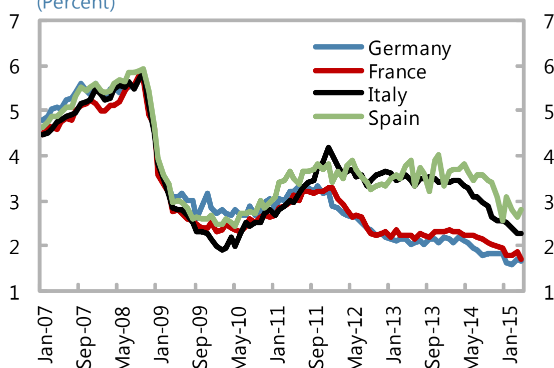


Sources: Federal Statistical Office, Ministry of Finance, and IMF staff calculations and projections.

Figure 5. Credit Conditions and Asset Prices

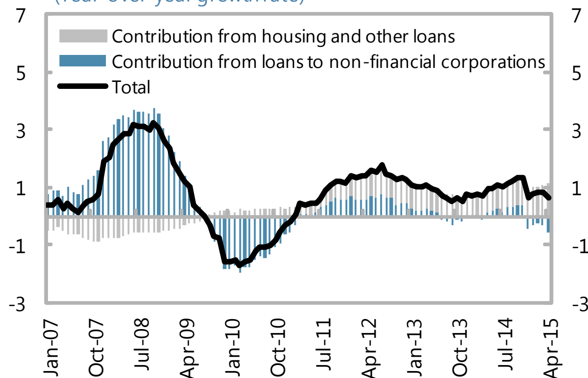
Despite favorable lending rates...

Lending Rates on New Loans to Non-financial Corporations
(Percent)



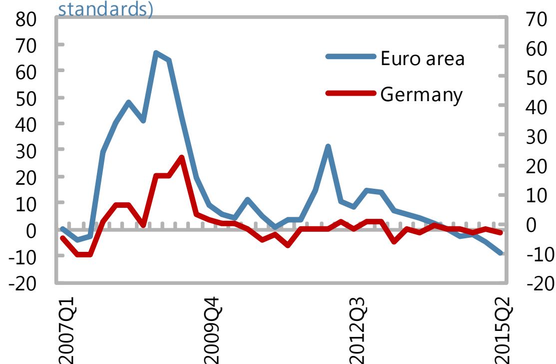
...credit growth remains anemic, especially in the corporate sector.

Germany: Lending by Monetary Financial Institutions
(Year-over-year growth rate)



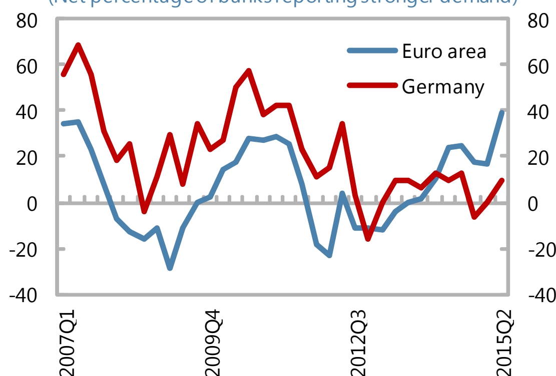
Credit standards continue to be supportive...

Change in Credit Standards for Loans to Enterprises, Past 3 Months
(Net percentage of banks reporting tightening credit standards)



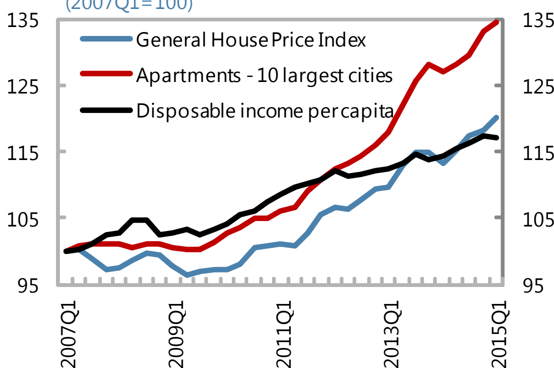
...but demand for corporate credit is lackluster.

Change in Credit Demand by Enterprises in the Next 3 Months
(Net percentage of banks reporting stronger demand)



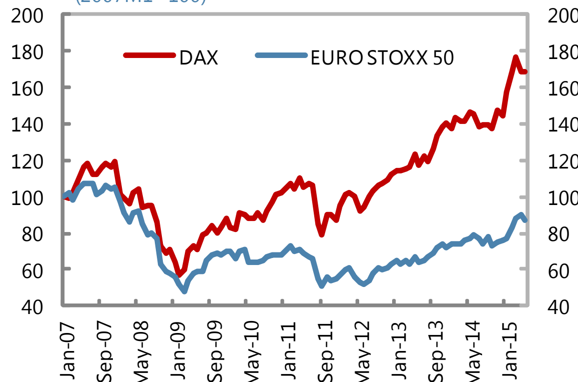
Housing prices are rising only modestly faster than disposable income...

House Price Indices and Disposable Income
(2007Q1=100)



....while the stock market is booming.

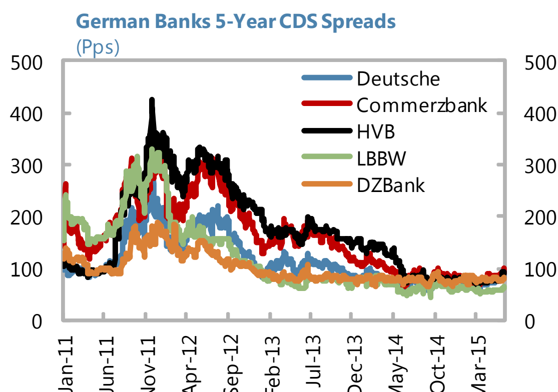
Stock Market Indices
(2007M1=100)



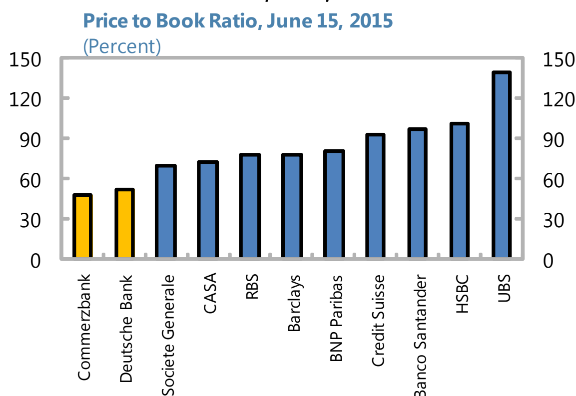
Source: ECB, Haver Analytics, and IMF staff calculations.

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

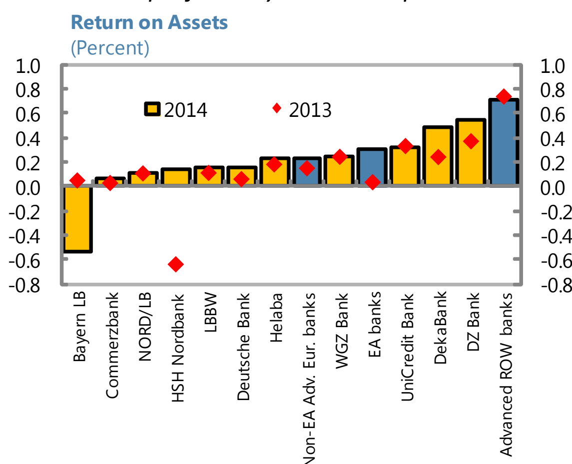
Large banks' perceived riskiness remains low...



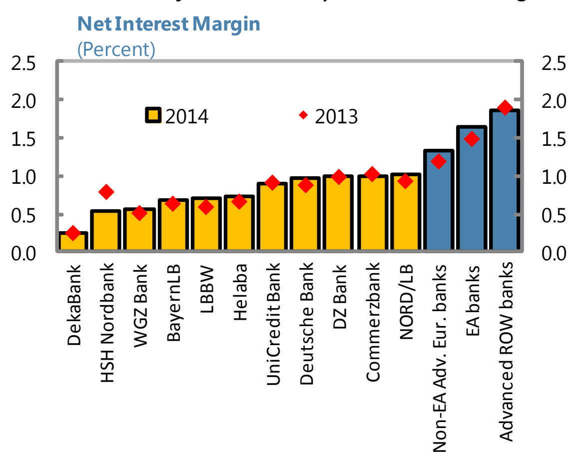
...but they keep trading at a discount to European peers.



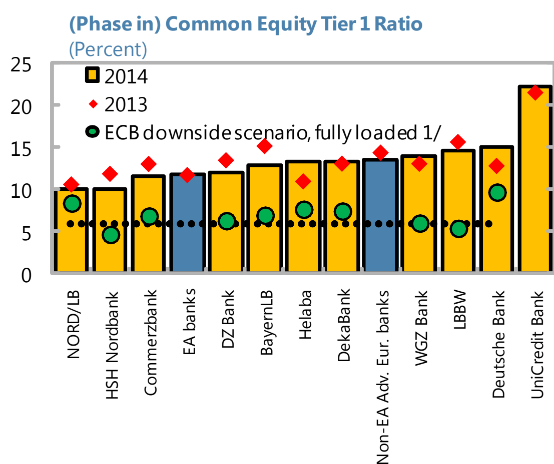
Their profitability remains depressed...



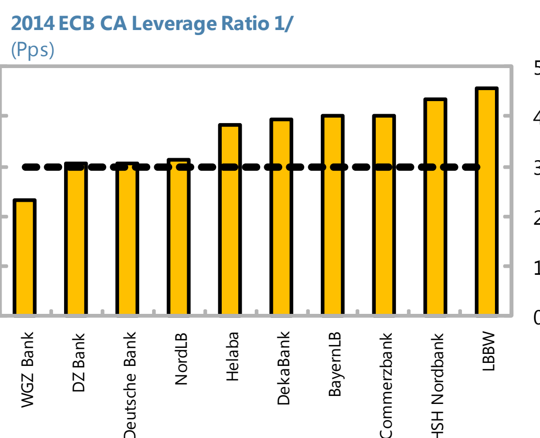
...because of a structurally low interest margin.



Capital buffers under stress at the time of the Comprehensive Assessment were thin...



... and leverage was high.



Source: Bloomberg, ECB, IFS, SNL Financial, and IMF staff calculations.
1/ Includes capital raised during January- September 2014.

B. Outlook and Risks

7. **The more favorable external environment should support the growth momentum**. The robust private consumption dynamics of the past three quarters is projected to persist with the help of lower energy prices and strong real wage growth. The euro depreciation and lower real interest rate (as QE pushes up inflation expectations) should buttress exports as well as the long-awaited recovery in machinery and equipment investment. Although corporate credit demand is expected to remain muted in a context of cash-rich corporate balance sheets and increasing profit margins for exporters, QE-induced lower real interest rates should translate into somewhat firmer credit growth. The fiscal stance should remain slightly expansionary in 2016 (see below). Employment growth should slow down as the adverse effect of the lower statutory retirement age for some categories of workers on labor force participation kicks in fully and the already low unemployment rate becomes harder to reduce further. All in all, GDP is expected to grow by 1.6 percent this year and 1.7 percent next year. The output gap should close this year and remain positive but small in the medium term. Together with a better anchoring of expectations because of QE (and despite only limited expected pass through from the exchange rate depreciation and the introduction of the minimum wage) this positive output gap should gradually push up core and headline inflation. Although German inflation is expected to exceed that in the rest of the euro area throughout the forecast horizon, it is not projected to rise above the ECB price stability objective.

8. **Fiscal balances are set to remain comfortably within the boundaries of the fiscal rules**. For the remainder of the legislature (2015–17) and beyond, budget plans are centered on a zero balance at the federal level with small surpluses for the general government, backed by buoyant revenue forecasts. Staff expects larger surpluses than the authorities, mostly on account of lower projected interest payments (Table 2), enough to bring public debt below 60 percent of GDP by 2020. Although the structural fiscal balance is expected to decline by 0.6 percent of GDP through 2015–17, debt sustainability analysis shows that the medium-term position is well anchored by the fiscal rules (see Appendix IV).

9. **The current account surplus is projected to grow further in 2015 and decline only moderately in the medium term.** The oil and gas trade balance is expected to continue to improve as energy prices remain lower on average than in 2014. In addition, the real exchange rate depreciation (of 6 percent in effective terms relative to 2014) will also put upward pressure on the external balance. As a result, the surplus is expected to exceed 8 percent of GDP, a record high, and decline gradually to 6.7 percent in 2020, as the terms of trade windfall is gradually spent, private investment recovers modestly, and stronger wage growth relative to euro area trading partners contributes to realign competitiveness.

10. **Risks to the baseline are more balanced than a year ago, but important sources of uncertainty remain.** There is upside risk to the outlook if the stimulus from monetary policy and oil prices that is in the pipeline proves more effective than expected. On the downside, a number of external risks could affect Germany, with possible impact ranging from low to moderate (see Appendix I):

- A protracted period of slower growth in key advanced and emerging economies or a deeper-than-expected slowdown in China would dampen economic activity in Germany. Unusually for a large economy, Germany is very open, with an exports-to-GDP ratio over 45 percent, and thus highly sensitive to external demand fluctuations. While the geographic structure of exports is well diversified, a simultaneous shock to major emerging economies would have a sizable impact on Germany (Box 1).

- Renewed stress in the euro area, triggered by policy uncertainty, faltering reforms, or political unrest in some countries might erode confidence and postpone once again the projected investment recovery. Further monetary stimulus at the euro area level would be forthcoming in this scenario, but it may need to be reinforced by demand-support measures in Germany.

- Uncertainty about the persistence of the oil supply shock and the underlying price decline could undo part of the recent improvement in consumer and business confidence, both domestically and in key trading partners. This would be a low-impact shock.

- An escalation of trade sanctions with Russia would hurt Germany because of its heavy dependence (30 percent) on oil and gas imports from that country and might require a reform of the energy strategy. Other direct trade ties and financial exposures are limited. Germany could also experience safe haven inflows if tensions rise.

Authorities' Views

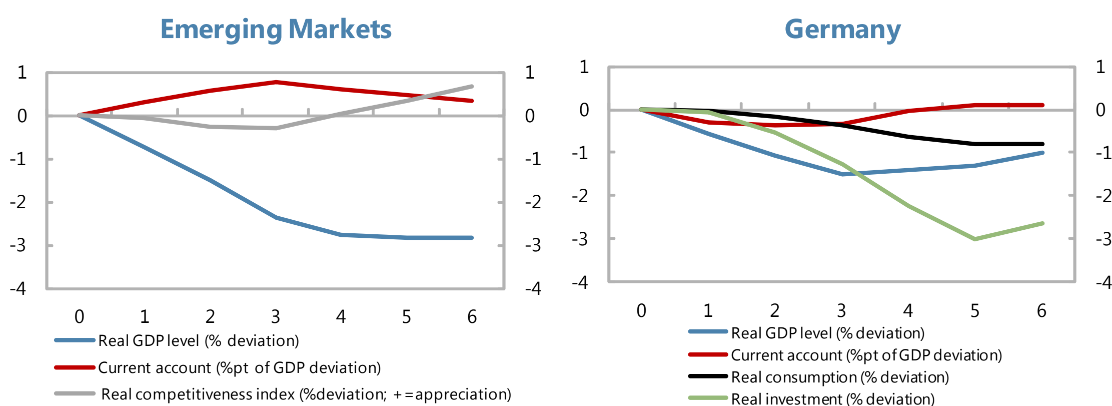
11. **The authorities agreed with staff that the moderate expansion of the German economy is likely to continue.** They expressed confidence in a consumption-led upswing, amid lower energy prices as well as solid wage growth underpinned by a tight labor market and closed output gap. While they concurred with staff that inflationary pressures would be muted this year, the Bundesbank underscored that prices were likely to accelerate owing to pass-through from exchange rate depreciation as well as the introduction of the minimum wage and recent wage dynamics more generally, so that inflation would reach close to 2 percent in 2016. The authorities agreed that the current account surplus would decline only gradually. They also concurred that public debt is well-anchored by EU and national fiscal rules, although they foresaw convergence to the 60 percent Stability and Growth Pact objective at a slower pace than in staff's projections.

12. **The authorities saw the risks to the outlook as generally balanced.** On the upside, they noted that private investment could turn out stronger than expected and drive a more forceful recovery. On the downside, the authorities saw instability in the euro area as a result of renewed sovereign stress, possibly amplified by relatively low liquidity in some market segments, as the most relevant risk at the moment, though they noted that the system was now much more resilient than in the past. They also pointed out that heightened exchange rate volatility was a source of risk, and was seen as such by many German corporations.

Box 1. Impact on Germany of Slower Growth in Emerging Markets

Growth in emerging markets (EMs) was disappointing in the last two years and there is mounting evidence that a sizable part of the growth slowdown may have been structural (see World Economic Outlook, April 2015). Based on simulations using the Fund's G20-MOD model, this box analyses the consequences on the German economy of a further slowdown in EMs (Brazil, China, India, Indonesia, Mexico, Russia, South Africa, and Turkey). In this scenario, the EM deceleration is due to a permanent decline in the level of total factor productivity (with respect to baseline) that is initially perceived as cyclical. As a result, EM monetary policy is loosened and currencies depreciate. As successive negative growth surprises occur, agents gradually become aware that the slowdown is in fact structural and the monetary loosening is gradually reversed.

Germany is among the most affected economies in the euro area under this scenario. Lower growth in EMs (GDP is 3 percent lower than in the baseline at the end of the fourth year) spills over to the global economy, including through a significant negative impact on commodity prices. Among Advanced Economies (AEs), the negative impact is the largest for Japan and the euro area given their trade exposures to EMs and their lack of (conventional) monetary policy space, though lower commodity prices help soften the blow somewhat. The drop in German GDP (-1.5 percent at the trough) is sizable and reflects Germany's large exposure to EMs. The current account surplus is almost unaffected (-0.4 pp of GDP) as domestic demand and imports also drop. Lower exports translate into lower labor demand, higher unemployment, lower wages, lower inflation, and higher real interest rates (given the zero lower bound on nominal interest rates), which combined with lower growth prospects, income and wealth lead to a permanent decline in investment and consumption compared with the baseline. Moreover, looser monetary policy in EMs initially depreciates their currencies against the euro, which further impacts Germany's competitiveness and weighs on exports. As EMs' central banks gradually realize that the slowdown is structural, they start normalizing policy thereby progressively correcting domestic and external imbalances. Germany's real exchange rate converges back to the baseline as does its current account, but the negative impact on consumption, investment and real GDP of the slowdown in EMs is much more persistent.



EXTERNAL ASSESSMENT

13. **Germany's external position is substantially stronger than implied by medium-term fundamentals and desirable policy settings.**

- The cyclically adjusted current account balance stood at 8.1 percent of GDP in 2014, while staff assesses the norm at 3–5 percent of GDP. Hence, the current account is 3–5 percentage points of GDP stronger than the value implied by fundamentals and desirable policies. While the EBA model attributes 0.6 percentage points of the current account gap to Germany's fiscal policy gap and 0.9 percentage points to the fiscal policy gaps in other countries, 3 percentage points remain unexplained and may be due to factors not fully captured by the model.

- The REER is assessed as undervalued by 5–15 percent in 2014. Applying standard trade elasticities to the current account gap yields a REER undervaluation of 7–12 percent, while the EBA REER level model suggests an undervaluation of 16 percent.

- Developments as of May 2015, notably the lower energy prices and depreciated REER, point to a further strengthening of the external position. Preliminary estimations of EBA REER models based on projections point to a larger undervaluation in 2015 if the current depreciation of the euro is sustained. While the current account surplus is projected to expand in 2015, the current account gap may remain stable because the EBA model norm is projected to increase as well, partly reflecting the evolution of demographic factors.

14. **Germany's current account surplus has been associated with a weaker domestic demand than in typical large and sustained current account surplus episodes in advanced countries**. Even though the size and the duration of Germany's surplus so far are in line with those of a typical episode, the weakness of domestic demand and, especially, the relatively strong fiscal position stand out (see Selected Issues). Real exchange rate or terms of trade movements did not play a major role in Germany's episode or elsewhere, with the exception of the ULC-based REER which depreciated in the run-up to and early years of the German episode. Exits from large and sustained current account surpluses, where they occurred, were typically accompanied by faster GDP growth—reflecting both higher potential growth and a stronger cyclical position.

Authorities' Views

15. **The authorities broadly agreed with the external sector assessment**. While they emphasized the difficulty of identifying the ultimate drivers of the CA surplus, they praised the refinements and expansions of the EBA methodologies, particularly the more sophisticated treatment of demographic factors and the improved methods to explain cross-country differences in REERs. They noted that the methodological improvements reduced the size of the unexplained regression residual for Germany and gave a more reasonable model estimate of the equilibrium REER. They broadly agreed with the ESR assessment, though the Bundesbank saw the REER undervaluation at the lower bound of the staff's range (around 5 percent for 2014).

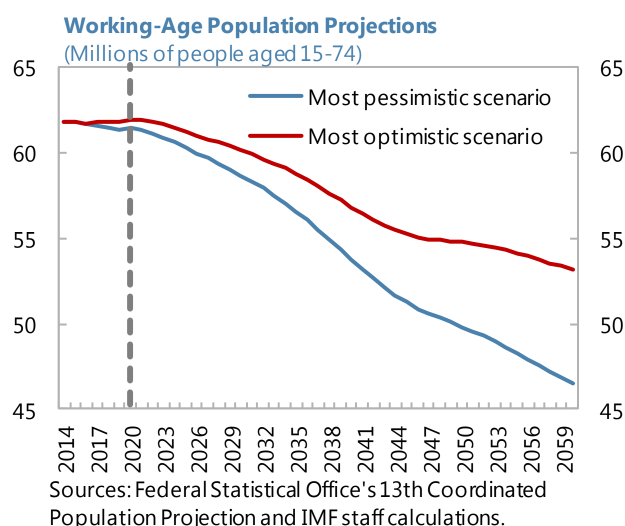
POLICY DISCUSSIONS

With the economy in a favorable cyclical position underpinned by robust balance sheets and partly buoyed by short-term factors, progress is urgently needed on policies to strengthen growth in the medium and long term, while also generating much needed positive outward spillovers and reducing the large current account surplus.

A. Strengthening Both Growth Potential and Domestic Demand while Reducing External Imbalances

16. **The working–age population is set to decline soon, which will put downward pressure on potential growth**. For now, stronger immigration and a modest upward trend in labor market participation by female and older workers have compensated for the adverse effects of aging on the labor force (Box 2). However, this will become increasingly challenging as aging will accelerate. Also, currently high immigration flows may not be sustainable, and further increases in labor force participation by older workers may be difficult to achieve in the future, as suggested, for instance, by the government's decision to lower the statutory retirement age for some categories of workers last year. Thus, if trend total factor productivity remains constant (as it has been in the recent past) and capital accumulation continues at its current modest pace, potential growth will decline rapidly after 2020.[2] Muted prospects for long-term growth, in turn, may be holding back domestic private investment despite very favorable financial conditions and healthy corporate balance sheets; they might also help explain the large domestic savings-investment surplus in the corporate sector—a major contributing factor to the current account surplus.

Working-Age Population Projections
(Millions of people aged 15-74)



Sources: Federal Statistical Office's 13th Coordinated Population Projection and IMF staff calculations.

17. **In light of the continued weakness in global demand, stronger domestic demand in Germany, where balance sheets are healthy, would have important positive spillovers.** Global demand remains weak as reflected by inflation below central banks' targets across advanced countries and especially in the euro area, where the need to repair balance sheets in the private and public sector continues to weigh on the recovery in vulnerable countries.[3] There is a concern that

[2] The European Commission's 2015 Aging Report projects that potential GDP growth will fall to 0.9 percent during the 2020's and to 0.8 percent in the following decade.

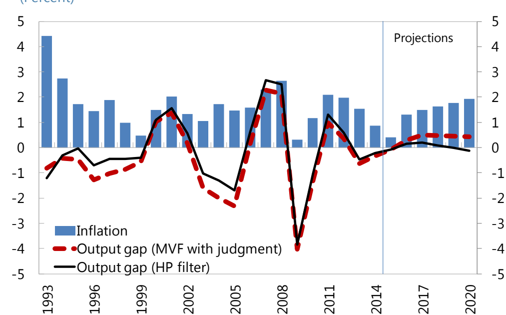
[3] See Chapter 1, World Economic Outlook, Spring 2015.

Box 2. Potential Output in Germany

Re-estimating the trajectory of potential output in EU countries is particularly relevant at the current juncture, in light of the introduction of the ESA 2010 national accounts methodology as well as the need to reliably identify the permanent damage to potential output inflicted by the crisis (World Economic Outlook, Spring 2015). Staff, therefore, re-estimated potential output for three large euro area countries (France, Germany, Spain) using the new multivariate filter (MVF) developed by Blagrave et al. (2015). 1/2/ The MVF improves upon commonly used univariate filters (e.g., the HP filter) *inter alia* by modeling relationships between GDP, potential GDP, unemployment and inflation. Judgment based on information outside of the model can be incorporated to improve the plausibility of results.

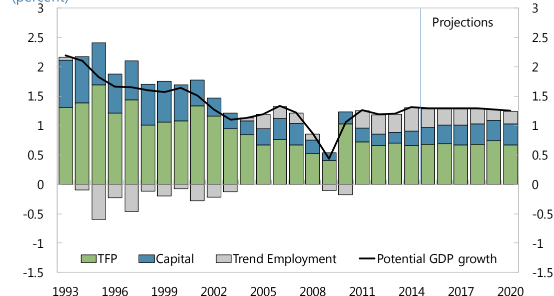
In Germany, in contrast with other advanced countries, the scars left by the global financial crisis on potential GDP growth appear limited. The MVF suggests that potential GDP growth in 2011-14 was at the same level as in 2005-07. Furthermore, a decomposition of potential GDP growth shows that the same is true for total factor productivity (TFP) growth. However, the contribution of capital has been small since 2009, reflecting a downward level shift in investment during 2009-10. This has been compensated by a larger contribution of labor, reflecting several cross-currents: high immigration has momentarily put a brake on the previously negative contribution of working age population; in parallel, continuous increases in the labor force participation rate have more than offset the decline in average hours worked per employed; finally, the employment rate has kept increasing following the Hartz reforms (see Box 3).

Germany: Output Gap and Inflation, 1993-2020
(Percent)



Sources: Staff calculations

Germany: Potential Output Growth and Contributions, 1993-2020
(percent)



Sources: Staff's calculations based on MVF model with judgment
Note: TFP=total factor productivity

Under current policies, German potential GDP growth should remain stable around 1.3 percent over the next few years but start a secular decline at the end of the projection horizon. Given the lack of major ongoing structural reforms, stable R&D investment rates, and no acceleration in international TFP spillovers, TFP growth is expected to remain steady, while a modest investment recovery will gradually push up the contribution of capital. This will offset a smaller labor contribution driven by a deceleration of the labor force participation rate and of the employment rate. However, looking beyond 2020, the 13th demographic projections recently released by the Federal Statistical Office suggest that the decline in the working-age population will resume as immigration flows normalize and larger cohorts reach the age of 75, resulting in lower potential growth.

1/ See "Potential Output in France, Germany, and Spain: A Reassessment," Chapter IV, Selected Issues for the 2015 Spain Article IV Consultation (forthcoming).
2/ Blagrave P., R. Garcia-Saltos, D. Laxton, and F. Zhang (2015), "A Simple Multivariate Filter for Estimating Potential Output," IMF Working Paper 2015/79.

ever-looser monetary policy might be insufficient to bring about a lasting recovery, or that low interest rates for long might lead to financial instability.[4] A host of policies are needed to address these problems, but stronger demand in Germany, where public and private balance sheets are sound, would be helpful. Stronger demand would also speed up adjustment in the current account surplus, reducing external imbalances.

18. **Policies should therefore focus on fostering potential growth while generating positive demand spillovers**. Using model simulations, last year's staff report argued that increased spending on public investment in needed infrastructure, policies to reduce regulatory uncertainty regarding the energy transition, and reforms to increasing productivity in the nontradable services sector would lift potential output and generate meaningful positive outward spillovers to the rest of the euro area, while reducing the current account surplus. In particular, higher public and private investment (the latter brought about by energy sector reforms) were found to have especially large spillover multipliers.[5]

19. **Policies that directly target higher wages may generate negative outward spillovers if they result in lower employment and weaker economic activity in Germany**. The widening current account surplus in the mid-2000s coincided with labor market reforms that strengthened incentives for the unemployed to return to work. The reforms were accompanied by declining real wages and unit labor costs (Box 3). While real wages and unit labor costs began to rise in 2008 and the labor share is back to its long-term average, the current account surplus has not declined, raising the question of whether policies should try to achieve faster wage growth to foster external rebalancing. Model simulations indicate that policies that directly target wage increases (such as a social pact or measures to strengthen the negotiating power of workers) would lead to a REER appreciation and a modest fall in the current account surplus, but would also bring about reductions in employment and production in Germany as well as negative growth spillovers to the rest of the euro area (see Selected Issues). By contrast, wage increases resulting from positive demand shocks would be associated with higher output and employment and a lower current account surplus in Germany as well as positive growth and economic activity in the rest of the euro area.

Authorities' Views

20. **The authorities agree that population aging is a primary concern and would be comfortable with a lower current account surplus, but emphasized that the current account balance is not a specific policy goal.** They shared concerns about declining long-term growth rates and lackluster private investment in spite of low interest rates, and were thus open to policies that might improve the corporate sector's willingness to invest in Germany and, through that avenue, reduce the current account surplus. However, they rejected any notion of fiscal stimulus citing the closed output gap and limited outward spillovers. They also emphasized that in a

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[4] See Chapter 1, Global Financial Stability Report, Spring 2015.

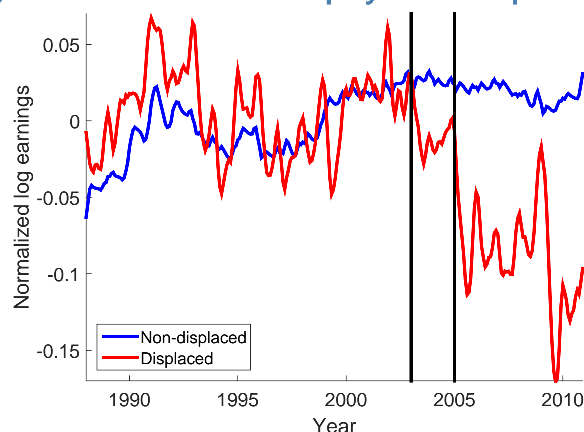
[5] See "Which Policies Can Boost German Growth and Reduce the Current Account Surplus?" Chapter III, Selected Issues for the 2014 Article IV Consultation. The paper also found that a fiscal expansion through lower taxes or higher consumption spending would have only small outward spillovers.

Box 3. The Hartz Labor Market Reforms 10 Years on

As other European countries, beginning in the mid-1970s Germany experienced an upward trend in the unemployment rate as increases in recessions were only partially reversed in expansions. In 2003-05, with unemployment at new highs, Germany embarked on a sweeping set of reforms (the Hartz reforms). The reforms eased regulation on temporary work agencies, relaxed firing restrictions, restructured the federal unemployment agency, significantly reduced benefits for long-term unemployed (which were high in international comparison), and tightened job search and acceptance obligations for benefit recipients. Following the reforms, the unemployment rate declined steadily and is now at its lowest level since reunification. Were the Hartz reforms a key factor in reducing structural unemployment or did other factors play a role?

Existing studies have argued that the reforms helped reduce unemployment and increased the efficiency of job search but lowered average wages and increased wage inequality. An alternative view is that the favorable labor market developments in Germany mainly reflected wage moderation induced by the competition from Eastern Europe. To shed further light on these questions, staff research (Niklas Engbom, Enrica Detragiache, Faezeh Raei, "The German Labor Market Reforms and Post-Unemployment Earnings," IMF Working Paper, forthcoming) using data from a detailed administrative dataset compares the pre- and post-reform labor market experience of two groups of workers: those in stable employment and those re-entering from unemployment from short-term unemployment (displaced workers). The chart below plots the median earnings of the two groups (normalized so that the two series have the same average during the pre-reform years), and shows that after the reforms the earnings of displaced workers fell markedly while those of other workers remained flat. This suggests that displaced workers were more willing to accept lower paying jobs to exit from unemployment after the reforms. The same result is confirmed when tested in a rigorous regression framework, in which observable and unobservable worker characteristics and macroeconomic factors are controlled for. These findings suggest that the reforms succeeded in strengthening incentives to return to work, thereby contributing to the sharp reduction in unemployment observed in Germany since 2005. As they achieved this goal, however, they imposed a higher burden on workers experiencing unemployment in terms of reduced post-unemployment earnings.

Normalized Earnings of Workers in Stable Employed and Displaced Workers



Note: Log monthly real labor income (12-month moving average).Full-time employed males age 25-62. Displaced workers had spent at least three years in continuous full-time employment prior to unemployment, transited from a full-time job to unemployment at some point 12 months ago and are currently full-time employed. Non-displaced workers have spent at least four years in full-time employment. The vertical bars denote the period of the Hartz reforms.
Source: Sample of Integrated Labor Market Biographies (SIAB).

monetary union, monetary policy—but not fiscal policy—should be set for the union as a whole. Overall, they were comfortable with current nominal and real wage growth, which they saw as reflecting the tightening labor market and bringing about the needed realignment of competitiveness within the euro area at an appropriate pace.

B. Public Investment

21. **The government stepped up initiatives to boost public investment, although there is scope for more ambitious action.** Last year, the Fund called for a 2 percent increase in investment in infrastructure over four years to address needs identified by expert studies. The federal government recently announced plans to raise public investment. These include 0.1 percent of GDP allocated to a new infrastructure fund for financially weaker municipalities in 2015 (plus a new allocation of about ½ this year's size for 2017) as well as new spending mostly in public transportation, the digital infrastructure, and energy efficiency improvements totaling 0.4 percent of GDP over 2016–18. All in all, the 2015 German Stability Program foresees the general government public capital spending to increase on average by 4.6 percent per year during 2015–19, against an average growth rate of 1.7 percent in 2011–14, and going from 2.2 percent of GDP in 2014 to 2.3 percent of GDP in 2019. A further boost to public investment is expected to come from financial relief granted to municipalities, although this effect cannot be quantified yet. Additional increments in infrastructure spending outside the general government (for instance, by public enterprises or private-public partnerships) may also be forthcoming. Overall, however, the new plans appear to be well short of last year's Fund advice. Delivering on the reminder of the proposed increase would be desirable. If fully financed through the budget, and implemented during the current legislature, such a program would utilize most of the fiscal space available under the MTO, bringing the general government structural balance down to -0.3 percent of GDP by 2017 (Figure 4). The medium-term fiscal position, however, would remain well anchored. The additional investment expenditure would also complement ongoing centralized investment initiatives at the European level, such as the European Fund for Strategic Investment (Juncker Plan).

22. **To facilitate ratcheting up public investment, new initiatives to improve the planning process at the local level and facilitate public private partnerships (PPPs) would be useful**. A third of public investment is executed at the municipal level. Stretched public finances in some regions have constrained investment budgets in the past and will likely continue to do so in the medium term, as regions need to reach zero structural balance by 2020. In addition, at the federal and general government level mounting aging costs and a normalization of real interest rates are likely to make meeting the fiscal rules in the future more challenging than at present, possibly putting renewed pressure on public investment budgets. Hence, alternative financing mechanisms such as PPPs may be useful to boost public investment now and help ensure adequate investment levels in the future. However, as local authorities may have limited expertise to contract with the private sector, and the planning process for infrastructure is seen as fragmented and less efficient than at the federal level, the creation of a coordinating agency could be particularly beneficial (see Selected Issues). Such an agency would advise on contract design, help improve information transparency, and inform the public debate on project selection by highlighting fiscal risks and cross-project externalities. In addition, sector-specific infrastructure companies, as proposed by the

Expert Commission on "Increasing Investment in Germany," would be helpful as long as the associated fiscal risks are appropriately managed, either by a transfer of project risks to the private sector or by including the companies in the general government perimeter.

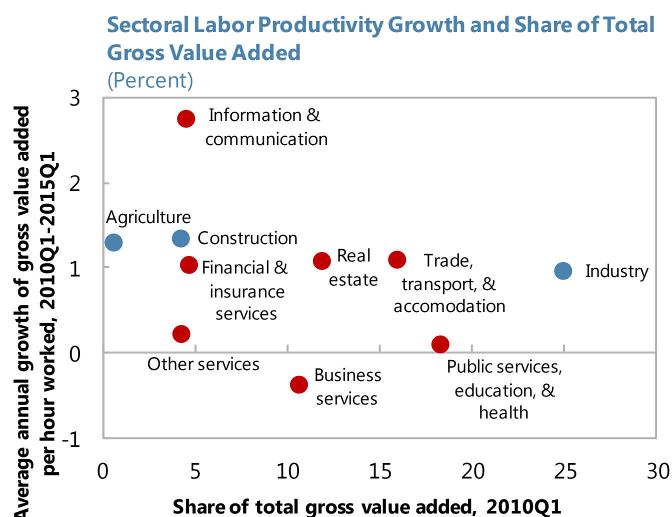
Authorities' Views

23. **The authorities noted that public investment had been stepped up substantially by the government and underlined the need to maintain buffers under the fiscal rule.** The Ministry of Finance viewed the new initiatives of the current government as a substantial investment expansion package, and did not see merit in further increases also in light of other priorities, such as income tax relief after years of "bracket creep." It also stressed the need to maintain some margins under the fiscal rules in case of adverse budgetary surprises and the benefit of having a budgetary anchor, such as a balanced federal budget, which can be easily explained to the public. The Ministry agreed that a coordinating agency could help mobilize investment at the local level, but pointed out that creating such an agency would take time (hence the importance of support from federal transfers in the short run), and it may prove challenging given the German federal framework.

C. Structural Reforms: Services Sector and Energy

24. **Competition-enhancing reforms in the services sector are very slow to materialize**. Labor productivity growth in the services sector remains low, particularly in business services. Barriers to competition have been documented by the OECD and the Monopolies Commission in several large sub-sectors, and their removal would boost productivity and potential growth.[6] Germany's leadership in this area would also likely help catalyze reforms in other European Union members. In the area of the regulated professions, the European Commission (EC)-led transparency and mutual evaluation exercise—focused on access conditions—will be completed in January 2016 and no conclusions have been drawn yet. The government has initiated a review of the restrictions on equity investment in the field of selected professions (e.g., architects and engineering companies) and results are expected by the end of the year. Regarding price regulation, the EC initiated pilot proceedings against Germany last December, *inter alia* posing questions with respect to the scale of fees of some professions. It is yet unclear whether this procedure will lead to any significant change. In the area of rail transportation, a new draft of the regulation law is being discussed, which is a not-

Sectoral Labor Productivity Growth and Share of Total Gross Value Added
(Percent)



Sources: Federal Statistical Office and IMF staff calculations.

[6] See "Services sector performance and product market regulation" Chapter IV, Selected Issues for the 2014 Article IV Consultation for greater detail.

to-be-missed opportunity to enhance regulatory powers to limit discriminatory practices by the incumbent operator and thus promote greater competition in all business segments.

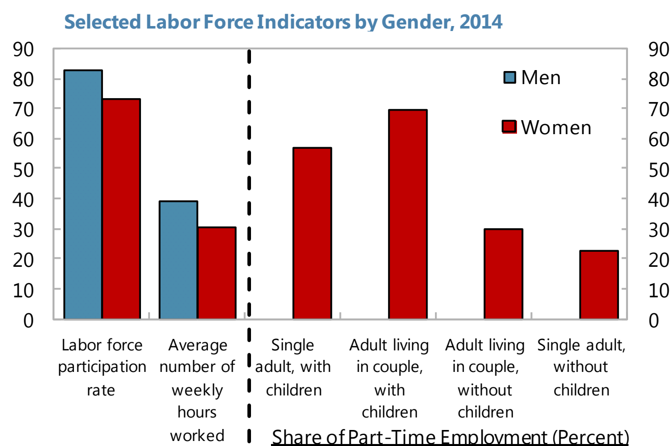
25. **On the energy front, progress is being made to tackle the challenges from the ambitious program of transition to renewable sources and nuclear phase-out, but several issues remain**. The Renewable Energy Act was amended last year to help contain costs for retail electricity users, while the EC decided to allow the continuation of subsidies for large companies competing internationally at least until 2020. However, this controversial subsidy, which is paid for by higher electricity charges on other users, remains uncertain in the long run; also, key decisions are still pending on how to secure conventional back-up capacity as renewable capacity is expanded. A still unresolved issue is how grid expansion can be expedited amid strong opposition by affected parties in some regions. These challenges should be addressed rapidly to ensure that electricity costs, already among the highest in Europe, do not continue to climb, and to remove important elements of uncertainty in private sector investment decisions.

Authorities' Views

26. **The authorities were confident that the energy transition would be successfully managed and acknowledged that progress in the area of professional services was slow.** On the energy agenda, they noted that, after many years of rapid growth, in 2015 the electricity price surcharge related to renewable sources had not increased—though this reflected in part statistical factors. They indicated that plans to auction off renewable subsidies would introduce more competition and help curb costs. In the services sector, they indicated that work to identify growth-enhancing product market competition policy measures was ongoing. More specifically, on regulated professions they agreed that there was scope for re-assessing the relevance of parts of the regulation, but noted that political support for these reforms was generally weak and that they required a case-by-case review to ensure that quality standards in the provision of services would not be compromised.

D. Countering Adverse Demographics: Female Labor Force Participation

27. **To counter the adverse effect of population aging on labor supply, stronger policies to spur female labor force participation are needed.** Although female labor force participation is relatively high in Germany (above 70 percent), about half of working women work part time (in part because women are the main holders of so-called mini-jobs), a pattern which is often attributed to an insufficient supply of good quality child care services and afterschool programs, as well as disincentives from the tax-benefit system (see Selected Issues). Closing this gap could help stem the projected decline in the labor force over the coming decades. Staff estimates that if the difference in average hours worked by men and women were fully closed, potential output would increase by as much as 7.5 percent. The federal government has recognized this as a priority and increased investment in the expansion of child care facilities by 0.1 percent of GDP in total over the last three years. However, faster progress in this area, for instance by making a comparable investment in the expansion of after school programs, is essential to broaden opportunities for women in the labor market. This would also help reduce poverty among single mothers. In addition, reforms to the tax-benefit system aimed at encouraging full-time work would also be beneficial. These could include lowering the tax wedge for secondary earners by moving closer to a system of individual taxation, reducing differences in the health-insurance premiums for working and non-working spouses, and targeting cash support for non-working parents to poorer households. Addressing both types of constraint simultaneously should allow for a more effective response of female labor supply.



Source: Eurostat.

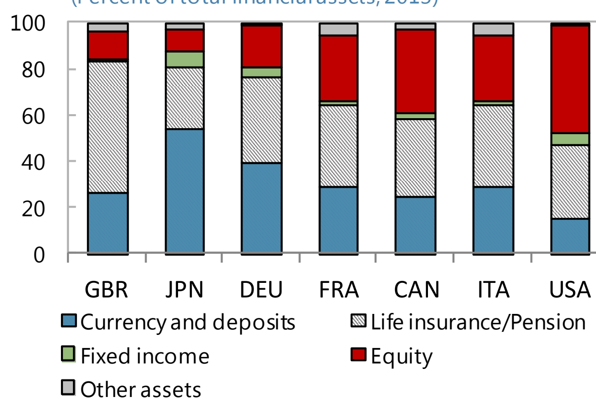
Authorities' Views

28. **The authorities stressed progress under way on female labor force participation.** They pointed out that female labor force participation in Germany is one of the highest among advanced economies, while the prevalence of part-time work partly reflects social preferences. Although they agreed that fiscal disincentives for secondary earners were high—in particular free health care coverage of spouses not working or working in a mini-job—they noted that the absence of widespread provision of high quality child care and afterschool programs was likely to be a more important constraint to full-time employment. In that context, they highlighted progress made in these areas over recent years, notably increased child care supply.

E. Monetary and Financial Sector Policies

29. **Although QE is expected to be very beneficial for the euro area recovery, its perception by the German public is generally negative.** A long-standing preference for low inflation and a relatively favorable cyclical position contribute to a concern that current monetary conditions may become too accommodative from a German perspective, a development that does not feature in staff's baseline macroeconomic scenario and is not seen as a significant risk by staff. In addition, German households hold a large share of their wealth in nontradable fixed income assets such as bank deposits and life insurance policies, typical mortgages have a fixed interest rate, and the rate of home ownership is low relative to other advanced countries.[7] Thus, in Germany lower interest rates and higher asset prices following QE do not translate into stronger household balance sheets as much as in other advanced countries.

Selected Advanced Economies: Composition of Household Financial Assets
(Percent of total financial assets, 2013)



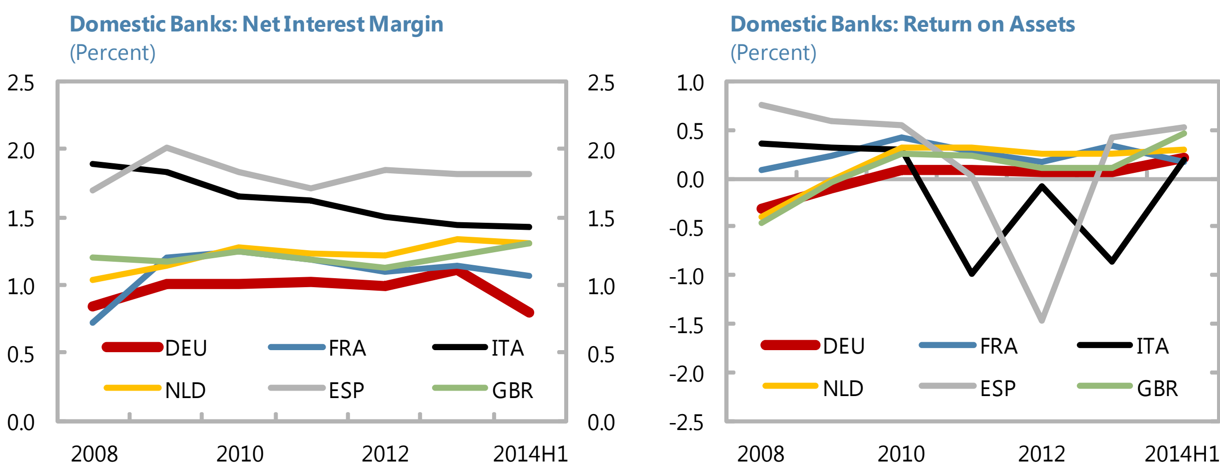
Sources: Haver Analytics and IMF staff calculations.

30. **The moderate upward trend in housing prices continues and the appropriate response at this stage is close monitoring and readying the macroprudential toolkit.** After years of stagnation, nominal housing prices at the aggregate level have grown at an annual pace of 3–4 percent for the past five years—only marginally faster than the growth in disposable income. In spite of falling lending rates, mortgage loan growth remains modest and lending standards appear stable. Thus, there are no signs of overheating yet. Nonetheless, developments in the most dynamic segments, such as apartments in large cities, deserve particular supervisory attention, and efforts to step up data collection on mortgage loan terms and conditions need to continue, including because of a significant share of high reported loan-to-value ratios (LTVs) in those segments in a recent Bundesbank survey. Last December, the Financial Stability Committee (FSC) announced that it was examining an expansion of the German macroprudential toolkit, as recommended by the FSB and the Fund last year. Introducing instruments constraining mortgage loan eligibility, such as loan-to-value and debt-service-to-income limits, would be very helpful, not only because they might be needed in the future, but also because of the signaling value of this policy decision. A carefully designed communication strategy would help make the most of this signaling value.

31. **In the banking sector, large banks' continued momentum to build up their capital position post SSM Comprehensive Assessment is welcome.** Germany's globally systemically

[7] At end-2013, households' equity holdings were only 19 percent of their total financial assets in Germany, compared to 28 percent in France and 47 percent in the United States. Reflecting low household appetite for equity investments, foreign residents own the majority of equities in listed companies (57.1 percent, rising to 63.7 percent for companies included in the flagship DAX index, as of end-May 2014).

important bank recently announced a new strategic plan whereby it will target a leverage ratio of 5 percent—a significant increase compared to the current level—bringing it more in line with its international peers. Germany's second largest bank recently completed a capital increase that will also bring its capital ratios closer to its European peers. Most other large domestically owned banks, which cannot rely on markets to raise fresh equity because of their corporate structure, are expected to keep building capital buffers through profit retention and/or continued refocusing on their German core business. A strong capital position is especially important in light of banks' low profitability. Depending on the bank, the latter reflects a combination of remaining crisis legacy problems (especially among banks under state aid procedures), litigation costs (in the two largest



Source: European Central Bank.

banks), the need to adjust business models to the post-crisis regulatory environment (in all large banks), as well as low interest margins (in the banking sector as a whole). The reform of the Landesbanken, which are particularly exposed to some of these challenges, is still under way, although deleveraging is slowing as non-core legacy portfolios have already shrunk significantly and selective new business is being underwritten.

32. **Close monitoring of the effects of the low interest rate environment on the banking sector is appropriate.** Net interest margins remain under pressure and well below those of European peers, and banks are reluctant to charge fees to retail customers. A recent Bundesbank study suggests that banks are increasing term transformation, exposing them to more interest rate risk. To better assess this risk, German supervisors have recently asked banks that are not directly supervised by the ECB to run bottom-up stress tests over five-year horizons under various yield curve assumptions. Further consolidation to cut costs, especially among the large number of small retail-focused institutions, would seem a natural response to the current environment but appears to keep proceeding only slowly.

33. **The German banking sector is adjusting to the new European supervisory and regulatory landscape.** ECB staff now coordinates with German supervisory bodies within the framework of the SSM. Work is ongoing within the SSM to improve the consistency of supervisory practices across countries and develop a common supervisory culture. Supervisory priorities this year include a review of business models, governance, and capital adequacy. Initiatives are ongoing to harmonize options and national discretions set out in the European capital regulation and

directive, while a process to implement a resource-intensive review of banks' internal models is being set-up. The Bank Recovery and Resolution Directive (BRRD) has been transposed and its bail-in regulation is in force since January 2015, one year ahead of the EU schedule. The harmonization of the Deposit Guarantee Schemes through the 2014 European Directive is forcing the cooperative banks and savings banks (together with the Landesbanken) to reform their respective joint protection schemes, so that they can be included in deposit guarantee schemes and recognized as statutory schemes. The forthcoming FSAP will be an opportunity to take stock of these transformations.

34. **Although a breach of regulatory requirements is not immediately in sight, life insurers still face solvency challenges over the medium term that need to be addressed by ensuring that adequate capital buffers are maintained.** The German life insurance sector is particularly vulnerable to a prolonged low interest rate environment as investment income may not be sufficient to meet returns guaranteed to policyholders over the medium-to-long term.[8] This challenge will only be made more salient by the soon-to-begin transition to the Solvency II regulatory framework.[9] The Life Insurance Reform Act passed in July last year included a reduced obligation to share unrealized gains with policyholders upon expiry of their contract, strict restrictions on dividend payments, and a reduction of the minimum guaranteed rate on new contracts. The Act is expected to have significantly positive effects on the sector's solvency, according to Bundesbank simulations.[10] However, the fall in yields since the reform was calibrated has made the underlying problem on the stock of existing contracts more challenging. Insurers have reacted mostly by reinvesting into longer duration, higher yielding assets, but this may not be enough and further protection of capital buffers is needed. Thus, vulnerable insurers should manage their profit participation with policyholders very prudently, and the new early intervention powers granted to supervisors by the reform last year should be used to ensure that this is the case. As standard guaranteed rates products still represent about 80 percent of the flow of new contracts, the industry as a whole would also benefit from the greater promotion of new products, such as unit-linked products, which embed much less interest rate risk.

Authorities' Views

[8] For more details, see "The German Life Insurance Sector: Confronting the Challenges of Low Interest Rates," Chapter VII, Selected Issues, 2014 Article IV Consultation. The pension funds sector is facing a similar problem, but is much smaller in size. At end 2013, total assets were EUR 923 bn in the life insurance sector versus EUR 167 bn in the pension funds sector.

[9] The current framework (Solvency I) is mainly based on historic cost accounting and is not risk-based. As a result, the immediate potential solvency impact of low interest rates under Solvency I is limited. The implementation of Solvency II from January 1, 2016 (with a phase-in period of 16 years) will see a gradual move to a market value and a risk-based solvency requirement that will explicitly calculate the interest rate risk capital surcharge and discount insurance liabilities using risk-free rates as a basis. As a result, any problem in meeting own funds requirements owing to low interest rates will come to light sooner.

[10] The Bundesbank study published last November concluded that in a severe stress scenario the market share of impaired insurers in 2023 would drop from 43 percent to 17 percent as a result of the reform, and that the balance sheet shortfall would be EUR 1.8 bn. No capital shortfall estimate was provided. The Bundesbank is planning to update these simulations in the near term.

35. **The authorities agreed that risks associated with the low interest rate environment in Germany and other advanced economies should be closely monitored.** They explained that households displayed strong liquidity preference and risk aversion, which was visible from the growing share of highly liquid deposits in their portfolios since 2008; by contrast, non-bank financial intermediaries showed a certain appetite for yield. They anticipated that the FSC would soon follow up on its announcement made last December that it was reviewing the appropriateness of the current macroprudential toolkit, in particular its ability to fully address possible financial stability concerns in the housing market. They also explained that the FSC strategy document published last year addressed a number of the 2014 FSB Peer Review recommendations, and that work on improving mortgage market databases was ongoing at the Bundesbank. Regarding the domestic life insurance sector, while acknowledging the extent of the challenge for the industry, Bafin emphasized that Germany had been proactive in its policy response over the past few years and recalled the introduction of the so-called interest rate reserve as early as 2011.

36. **The authorities emphasized the progress in building stronger capital buffers over the past several years and cautioned about too much harmonization of the capital framework within the SSM.** While recognizing that large German banks still had room to catch-up with their European peers in terms of leverage ratio, they emphasized the continued capital building dynamics. They expressed their appreciation for the general goal of harmonizing regulatory policy within the SSM, but noted that the underlying reasons for national options and discretions needed to be examined, as in some cases they might be justified. They also reiterated their position that it would be reasonable to abolish zero risk-weighting and apply a large exposures regime to sovereign bonds, as evidenced by the current experience with the resolution of state-owned Heta (Austria). In the area of bank recovery and resolution, they expected the European Banking Authority to publish technical standards on the minimum requirement for own funds and eligible liabilities (MREL) later this year, and explained that a draft German law currently under discussion would make senior unsecured (tradable) securities subordinated to the bank's other senior unsecured (non-tradable) liabilities in insolvency so as to provide greater legal certainty.

STAFF APPRAISAL

37. **The upturn is expected to continue in 2015, with growth lifted by the double stimulus of low energy prices and QE**. Private consumption should be the largest contributor to growth, underpinned by a strong increase in real disposable income. Inflation should remain subdued in the medium term, consistent with an output gap close to zero. A further decline in the historically low unemployment rate and sound wage growth point to a tightening of the labor market. Growth could be higher than forecast if the transmission of lower energy prices and QE proves more powerful than expected. Notable downside risks include weaker-than-expected growth in trading partners, or renewed stress in the euro area triggered by policy uncertainty or faltering reforms in some countries.

38. **Lower interest rates and the strong labor market will continue to support the fiscal position**. For the remainder of this legislature, budget plans are anchored on a zero balance at the federal level with small surpluses for the general government, on the back of buoyant revenues.

Staff expects larger fiscal surpluses than the authorities, mostly on account of lower projected interest payments, which would bring public debt below 60 percent of GDP by 2020. The structural fiscal balance should decline through 2015–17, while remaining comfortably above the Medium-Term Objective of the Stability and Growth Pact.

39. **The external position remains substantially stronger than implied by medium-term fundamentals and desirable policy settings.** The fall in energy prices and the exchange rate depreciation will boost the already large current account surplus. We project the surplus to exceed 8 percent of GDP this year and decline slowly in the medium term, as the energy price windfall is gradually spent and macroeconomic rebalancing in Germany and within the euro area strengthens. Recent solid wage and unit labor cost increases (against the background of rising employment) are welcome in this regard, as they facilitate this process. Nevertheless, the persistently large current account surplus is a source of concern in the current context of weak demand across advanced countries in spite of ultra-expansionary monetary policies. It may also reflect reluctance by the corporate sector to invest more in Germany, which hurts future growth prospects.

40. **Commitments to boost public investment should be more ambitious**. During the last consultation, the Fund recommended a public investment increase of some 2 percent of GDP over four years to address needs identified by expert studies. Such a program would stimulate private investment by removing infrastructure bottlenecks, thereby strengthening future growth potential. It would also support domestic demand in the short-to-medium run, help reduce the current account surplus, and generate positive spillovers to the rest of the euro area. While recently announced plans to expand public investment target important priorities, they do not fully address existing needs and a stronger effort would be warranted. This expenditure could be accommodated under the existing fiscal rules. In addition to infrastructure, the Energy Transition remains a source of regulatory uncertainty and high electricity costs for parts of the corporate sector, which should continue to be addressed so as to improve the investment climate.

41. **Infrastructure investment can benefit from initiatives to improve planning processes and take advantage of private sector expertise**. For instance, sector-specific infrastructure companies, as proposed by the Expert Commission on "Increasing Investment in Germany," would be helpful, as long as the associated fiscal risks are appropriately managed, either by a transfer of project risks to the private sector or by including the company in the general government perimeter. To boost investment at the municipal level, staff supports the use of alternative financing/execution mechanisms, such as public-private partnerships. However, as local authorities may have limited expertise to contract with the private sector, and the planning process for infrastructure is seen as fragmented and less efficient than at the federal level, the creation of a coordinating agency could be explored. Such an agency would advise on contract design and inform the public debate on project selection by centralizing information, enhancing transparency, and highlighting fiscal risks and cross-project externalities.

42. **With the prospect of a declining working–age population putting downward pressure on future growth, reducing existing disincentives for women to work full time is necessary**. Although female labor force participation is relatively high, about half of working women work only part time. While this may reflect individual and social preferences, the tax-benefit system likely

discourages labor supply, given the high overall marginal tax burden faced by secondary earners. In addition, provision of additional and higher quality child care services and after-school programs could facilitate the choices of working parents. Faster progress in these areas is essential to broaden opportunities for women in the labor market. It may also help address bottlenecks in the availability of qualified labor, which may be holding back private investment. In this regard, reviewing policies that favor early retirement would also be important.

43. **Fostering a more dynamic services sector through greater competition should be high on the structural reform agenda**. While a strong manufacturing sector has been the backbone of the German economy, sluggish productivity growth in services may hinder future potential growth as this sector continues to expand in relative size. Germany's leadership in this area would also likely help catalyze reforms in other EU members. In the area of regulated professions, the ongoing transparency exercise led by the EC is an opportunity to review which parts of the existing regulations are too restrictive. Pilot proceedings recently initiated by the EC against Germany regarding price regulation in some professions (architects, engineers, and tax advisors) might lead to some welcome relaxation. In rail transportation, reinforcing the regulator's powers to stop discrimination against the incumbent operator's competitors should be a key objective of the new regulation law being prepared.

44. **In the financial sector, the new European bank supervisory and regulatory landscape is taking shape, while the favorable domestic macroeconomic conditions support structurally weak bank profitability**. Banks are now supervised by the SSM, recovery and resolution planning is progressing, and safety nets are being strengthened in line with European directives and regulations. As long-term lending interest rates have fallen further, structurally low profitability is under greater pressure, and banks will have to address it by reducing costs or stepping up fee-based activities. However, the continued good performance of domestic loan portfolios has been partially offsetting these pressures through lower loan loss provisions.

45. **Steps recently taken by large banks to improve their capital position are welcome**. The SSM's Comprehensive Assessment last year revealed rather modest additional provisioning needs for large banks. However, the stress test showed that some capital buffers were thin when capital adequacy was measured on the basis of the fully implemented new European standards. In addition, leverage remains high in some banks. Against this background, Germany's two largest banks' recent measures to catch up with their international peers are reassuring. Nevertheless, profitability challenges remain beyond those related to the low interest environment and, depending on the bank, reflect various combinations of persistent crisis legacy issues, litigation costs, as well as the need to adjust the business model to the post-crisis regulatory environment. Close cooperation and coordination within SSM joint supervisory teams is particularly important in this context.

46. **A moderate upward trend in housing prices continues and the appropriate response at this stage remains close monitoring and readying the macroprudential toolkit**. There are no signs of overheating at the aggregate level and mortgage loan growth remains modest. Nonetheless, developments in hot spots bear monitoring, and efforts to step up data collection on mortgage loan terms and conditions need to continue, including in light of the significant share of loans with high loan-to-value ratios in segments of the market as revealed in a recent Bundesbank

survey. Staff continues to recommend that instruments constraining mortgage loan eligibility, such as loan-to-value and debt-service-to-income limits be introduced in the macroprudential toolkit. The publication by the Financial Stability Committee of a strategy document is welcome.

47. **Further actions need to be taken to tackle vulnerabilities in the life insurance sector in spite of the beneficial effects of the reform passed last year**. The life insurance sector is particularly vulnerable to a prolonged low interest rate environment as investment income may not be sufficient to meet returns guaranteed to policyholders over the medium-to-long term. This challenge will only be made more salient by the transition to the new Solvency II regulatory framework set to begin next year. The 2014 life insurance reform, which includes a reduced obligation to share unrealized gains with policyholders upon lapsing of their contract, is expected to have significantly positive effects on the sector's solvency according to Bundesbank simulations. However, the fall in yields since last summer requires that the industry exert great prudence in the management of profit participation with policyholders and promote new products that embed much more limited interest rate guarantees. In parallel, supervisors should make full use of the additional early intervention powers granted to them by the new law to ensure prudent behavior.

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

Table 1. Germany: Selected Economic Indicators, 2012-16

Total population (2014, million)	81.1				
GDP per capita (2014, USD)	47,615				

				Projections	
	2012	2013	2014	2015	2016
		(Percentage change)			
GDP	0.6	0.2	1.6	1.6	1.7
Output gap (In percent of potential GDP)	0.4	-0.6	-0.3	0.0	0.3
Private consumption	0.6	0.9	1.2	2.0	1.5
Public consumption	1.2	0.7	1.2	2.0	1.2
Gross fixed investment	0.0	-0.5	3.3	1.7	2.1
Construction	1.6	0.1	3.4	1.5	1.9
Machinery and equipment	-2.3	-2.1	4.2	2.0	2.7
Final domestic demand	0.6	0.6	1.6	2.0	1.5
Inventory accumulation 1/	-1.4	0.1	-0.3	-0.3	0.1
Total domestic demand	-0.8	0.8	1.4	1.7	1.7
Exports of goods and nonfactor services	3.5	1.7	3.7	4.1	4.3
Imports of goods and nonfactor services	0.4	3.2	3.4	4.8	4.9
Foreign balance 1/	1.4	-0.5	0.3	0.0	0.1
		(In millions of persons, unless otherwise indicated)			
Employment and unemployment 2/					
Labor force	41.3	41.6	41.8	42.0	42.1
Employment	39.0	39.4	39.8	40.0	40.1
Unemployment	2.2	2.2	2.1	2.0	2.0
Unemployment rate (in percent)	5.4	5.2	5.0	4.8	4.7
		(Percentage change)			
Prices and incomes					
GDP deflator	1.5	2.1	1.7	2.3	1.0
Consumer price index (harmonized)	2.1	1.6	0.8	0.4	1.3
Compensation per employee (total economy)	2.9	1.7	3.0	2.7	2.8
Unit labor cost (manufacturing)	4.0	3.4	0.8	1.0	1.0
Real disposable income 3/	0.5	0.5	1.5	2.2	1.6
Household saving ratio (in percent)	9.4	9.1	9.4	9.3	9.4

Table 1. Germany: Selected Economic Indicators (concluded)

	2012	2013	2014	Projections 2015	2016
	(In billions of euros, unless otherwise indicated)				
Public finances					
General government					
Expenditure	1,215	1,245	1,276	1,326	1,351
(In percent of GDP)	44.2	44.3	44.0	43.8	43.5
Revenue	1,218	1,249	1,294	1,342	1,362
(In percent of GDP)	44.3	44.5	44.6	44.4	43.8
Overall balance 4/	3	4	18	16	12
(In percent of GDP)	0.1	0.1	0.6	0.5	0.4
Structural balance	0	14	21	12	6
(In percent of GDP)	0.0	0.5	0.7	0.4	0.2
Federal government					
Overall balance 4/	-15	-4	13	12	11
(In percent of GDP)	-0.5	-0.2	0.4	0.4	0.3
General government debt	2,180	2,166	2,170	2,135	2,110
(In percent of GDP)	79.3	77.1	74.7	70.6	67.9
	(In billions of U.S. Dollars, unless otherwise indicated)				
Balance of payments					
Current account	240.8	241.7	292.0	284.8	276.0
(In percent of GDP)	6.8	6.5	7.6	8.4	7.9
Trade balance 5/	1951.6	1959.5	2018.2	2138.5	2254.9
Services balance	420.5	446.4	457.8	482.8	511.0
Factor income balance	66.8	60.2	66.9	62.5	63.4
Net private transfers	-25.8	-26.2	-24.3	-24.3	-24.3
Net official transfers	-14.4	-14.9	-13.1	-14.7	-15.7
Foreign exchange reserves (EUR billion, e.o.p.) 6/	28.8	28.1	30.6	…	…
	(Percentage change)				
Monetary data					
Money and quasi-money (M3) 6/ 7/	7.1	2.6	4.8		
Credit to private sector 6/	1.3	0.8	0.6		
	(Period average in percent)				
Interest rates					
Three-month interbank rate 6/	0.6	0.2	0.2		
Yield on ten-year government bonds 6/	1.6	1.6	1.2		
Exchange rates					
Euro per US$	0.76	0.73	0.81		
Nominal effective rate (1990=100) 6/	98.1	101.5	99.8		
Real effective rate (1990=100) 6/	96.5	99.7	97.3		

Sources: Deutsche Bundesbank; Federal Statistical Office; IMF staff estimates and projections.
1/ Contribution to GDP growth.
2/ ILO definition.
3/ Deflated by national accounts deflator for private consumption.
4/ Net lending/borrowing.
5/ Excluding supplementary trade items.
6/ Data refer to end of December.
7/ Data reflect Germany's contribution to M3 of the euro area.

Table 2. Germany: General Government Operations, 2012-20

	2012	2013	2014	2015	2016	2017	2018	2019	2020
				Projections					
Revenue 1/	44.3	44.5	44.6	44.4	43.8	43.9	43.9	44.1	44.1
Taxes	22.6	22.7	22.7	22.8	22.7	22.7	22.9	22.9	22.9
Indirect taxes	11.3	11.0	11.0	11.0	10.9	11.0	11.0	11.1	11.1
Direct taxes	11.3	11.7	11.8	11.8	11.7	11.7	11.8	11.9	11.9
Social contributions	16.5	16.6	16.6	16.5	16.5	16.6	16.6	16.9	16.9
Grants	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
Other current revenue	5.0	5.0	5.1	4.9	4.5	4.4	4.3	4.2	4.2
Expense	44.4	44.4	44.0	43.9	43.5	43.5	43.3	43.0	43.0
Compensation of employees	7.7	7.7	7.7	7.6	7.6	7.5	7.4	7.3	7.3
Goods and services	4.6	4.7	4.6	4.7	4.7	4.6	4.5	4.5	4.5
Interest	2.3	2.0	1.7	1.5	1.2	1.2	1.1	1.0	0.9
Subsidies	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Social benefits	23.5	23.7	23.8	24.0	24.0	24.2	24.2	24.2	24.2
Social benefits in kind	7.8	8.1	8.2	8.4	8.4	8.6	8.7	8.8	8.8
Social transfers	15.6	15.7	15.6	15.6	15.5	15.6	15.5	15.4	15.4
Pensions	9.0	8.9	8.9	8.9	8.9	8.9	8.8	8.8	8.8
Child benefits	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Unemployment benefits	1.5	1.5	1.5	1.5	1.5	1.5	1.4	1.4	1.4
Other social transfers	4.4	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Other expense	5.4	5.3	5.2	5.2	5.2	5.1	5.2	5.1	5.1
Net acquisition of nonfinancial assets	-0.2	-0.1	0.0	0.0	-0.1	0.0	0.0	0.0	0.0
Net lending/borrowing	0.1	0.1	0.6	0.5	0.4	0.5	0.7	1.2	1.2
Primary balance	2.4	2.2	2.4	2.1	1.6	1.6	1.8	2.2	2.1
Memorandum item:									
Structural balance	0.0	0.5	0.7	0.4	0.2	0.2	0.4	0.9	0.9
Change in structural balance	1.0	0.5	0.2	-0.3	-0.2	0.0	0.2	0.5	0.0
Public gross debt (Maastricht definition)	79.3	77.1	74.7	70.6	67.9	65.3	62.6	59.6	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, 2012-20

	2012	2013	2014	*Projections* 2015	2016	2017	2018	2019	2020
	(Percentage change unless otherwise indicated)								
Real sector									
Real GDP	0.6	0.2	1.6	1.6	1.7	1.5	1.3	1.3	1.2
Total domestic demand	-0.8	0.8	1.4	1.7	1.7	1.5	1.4	1.4	1.4
Foreign balance (contribution to growth)	1.4	-0.5	0.3	0.0	0.1	0.1	0.0	-0.1	-0.1
Output gap (percent of potential GDP)	0.4	-0.6	-0.3	0.0	0.3	0.5	0.5	0.5	0.5
Consumer prices	2.1	1.6	0.8	0.4	1.3	1.5	1.6	1.8	1.9
	(Percent of GDP)								
External sector									
Current account balance	6.8	6.5	7.6	8.4	7.9	7.5	7.3	7.1	6.7
Goods and services balance	5.8	5.8	6.5	7.7	7.2	6.8	6.4	6.0	5.5
General government									
Overall balance	0.1	0.1	0.6	0.5	0.4	0.5	0.7	1.2	1.2
Gross debt	79.3	77.1	74.7	70.6	67.9	65.3	62.6	59.6	57.0

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

Table 4. Germany: Balance of Payments, 2012–20

(Percent of GDP)

	2012	2013	2014	*Projections* 2015	2016	2017	2018	2019	2020
Current account	6.8	6.5	7.6	8.4	7.9	7.5	7.3	7.1	6.7
Trade balance	5.8	5.8	6.5	7.7	7.2	6.8	6.4	6.0	5.5
Trade in goods	7.1	7.4	7.9	8.6	8.2	7.9	7.5	7.1	6.7
Exports	39.1	38.6	38.7	39.6	40.4	41.2	42.2	43.1	44.0
Imports	31.9	31.2	30.8	31.1	32.2	33.4	34.6	35.9	37.2
Trade in services	-1.3	-1.6	-1.3	-0.9	-1.0	-1.1	-1.1	-1.1	-1.2
Exports	7.0	7.1	7.2	7.5	7.7	7.9	8.1	8.3	8.6
Imports	8.3	8.7	8.6	8.4	8.7	9.0	9.3	9.5	9.8
Income balance	2.4	2.1	2.3	2.1	2.0	2.1	2.2	2.4	2.5
Receipts	7.6	6.8	6.7	6.2	5.5	5.2	5.7	6.1	6.5
Payments	5.1	4.7	4.4	4.1	3.5	3.2	3.5	3.8	4.0
Current transfers	-1.5	-1.5	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3
Capital and Financial Account	5.8	7.4	8.5	8.4	7.9	7.5	7.3	7.1	6.7
Capital account	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Financial account	5.7	7.4	8.4	8.4	7.9	7.5	7.3	7.1	6.7
Direct Investment	1.3	0.3	2.9	0.6	0.6	0.6	0.6	0.6	0.6
Domestic	4.1	2.2	5.9	3.1	3.1	3.1	3.1	3.1	3.1
Abroad	2.8	1.9	3.1	2.5	2.5	2.5	2.5	2.5	2.5
Portfolio investment balance	2.0	5.8	4.4	4.4	4.1	3.9	3.8	3.7	3.5
Financial derivatives	0.9	0.9	1.1	1.1	1.0	1.0	1.0	0.9	0.9
Other financial transactions	1.5	0.4	0.2	2.3	2.2	2.0	2.0	1.9	1.7
Change in reserve assets	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
Net errors and omissions	-1.0	1.0	0.9	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, 2006-14

(Percent of GDP)

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Assets	206.8	221.5	188.5	220.8	255.7	236.0	271.7	255.4	239.9
Direct investment	41.2	44.9	38.8	46.9	47.8	45.2	54.0	55.2	51.5
Portfolio investment	75.5	76.3	57.1	73.3	74.8	63.4	78.1	82.6	79.7
Equity and investment fund shares	29.5	27.7	15.7	20.7	21.6	17.2	21.1	24.6	24.3
Debt securities	46.1	48.6	41.4	52.6	53.1	46.1	56.9	58.0	55.3
Financial derivatives (other than reserves) and employee stock options					30.7	31.6	35.2	23.0	24.7
Other investment	86.4	96.4	89.0	95.3	96.1	89.5	97.4	89.2	79.1
Reserve assets	3.7	4.0	3.7	5.3	6.3	6.4	7.0	5.3	5.0
Liabilities	178.5	194.0	166.5	189.8	224.6	209.3	247.6	224.7	206.7
Direct investment	34.3	36.2	30.2	35.4	35.4	33.3	40.6	42.2	36.7
Portfolio investment	83.6	95.8	78.3	93.3	92.7	85.5	99.8	95.7	88.1
Equity and investment fund shares	20.8	26.4	12.5	18.9	19.5	15.1	19.8	22.9	19.7
Debt securities	62.8	69.3	65.8	74.4	73.2	70.5	80.0	72.8	68.4
Financial derivatives (other than reserves) and employee stock options					30.7	32.0	35.4	22.9	25.7
Other investment	60.6	62.0	58.0	61.0	65.8	58.4	71.8	63.9	56.2
Net International Investment Position	28.3	27.5	22.0	31.0	31.0	26.7	24.2	30.7	33.2
Direct investment	6.9	8.7	8.6	11.5	12.4	11.8	13.4	13.0	14.8
Portfolio investment	-8.1	-19.5	-21.3	-20.0	-18.0	-22.2	-21.7	-13.0	-8.4
Financial derivatives (other than reserves) and employee stock options					-0.1	-0.5	-0.2	0.1	-1.0
Other investment	25.8	34.3	31.0	34.3	30.3	31.1	25.6	25.3	22.9

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
(In percent)

	2009	2010	2011	2012	2013	2014
Capital adequacy						
Regulatory capital to risk-weighted assets	14.8	16.1	16.4	17.9	19.2	18.0
Commercial banks	14.9	15.4	15.6	17.8	18.9	17.2
Landesbanken	14.9	17.1	17.7	18.8	21.3	18.4
Savings banks	14.7	15.1	15.8	15.9	16.4	16.6
Credit cooperatives	14.0	14.7	15.6	15.8	16.6	17.4
Regulatory Tier I capital to risk-weighted assets	10.8	11.8	12.1	14.2	15.6	15.4
Commercial banks	12.1	12.9	13.1	15.0	16.1	15.5
Landesbanken	10.5	12.1	12.7	14.0	16.9	14.7
Savings banks	9.7	9.9	10.5	12.5	13.4	14.5
Credit cooperatives	9.5	9.8	10.4	11.1	12.0	13.5
Asset composition and quality						
Sectoral distribution of loans to total loans						
Loan to households	26.3	26.2	26.2	26.8	28.5	28.7
Commercial banks	23.2	22.3	21.4	20.8	22.9	22.3
Landesbanken	5.2	5.4	5.4	5.6	5.8	5.6
Savings banks	57.6	57.7	56.2	57.2	57.4	57.0
Credit cooperatives	66.4	67.0	66.8	68.7	69.3	69.8
Loans to non-financial corporations	14.8	14.6	14.6	14.9	15.6	15.2
Commercial banks	12.9	12.1	11.9	11.5	12.3	12.0
Landesbanken	18.2	18.4	19.1	20.8	22.4	22.5
Savings banks	19.6	20.1	20.3	21.5	22.0	21.7
Credit cooperatives	13.6	14.3	14.1	15.2	16.0	16.6
NPLs to gross loans	3.3	3.2	3.0	2.9	2.7	
Commercial banks	2.3	2.1	2.0	1.9	1.8	
Landesbanken	3.2	4.1	4.1	4.5	4.8	
Savings banks	4.3	3.8	3.5	3.1	2.8	
Credit cooperatives	4.4	3.9	3.5	3.2	2.8	
NPLs net of provisions to capital	36.9	34.2	31.6	27.4	23.8	
Commercial banks	29.8	20.4	19.1	16.4	13.3	
Landesbanken	35.1	46.0	45.6	46.6	49.4	
Savings banks	39.6	36.2	35.3	31.5	27.6	
Credit cooperatives	42.1	38.1	34.0	30.8	26.8	

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

	2009	2010	2011	2012	2013	2014
Earnings and profitability						
Return on average assets (after-tax)	-0.1	0.2	0.3	0.2	0.2	
Commercial banks	-0.2	0.1	0.0	0.1	0.1	
Landesbanken	-0.3	-0.1	0.0	0.1	-0.1	
Savings banks	0.2	0.4	1.3	0.6	0.5	
Credit cooperatives	0.3	0.5	0.7	0.7	0.8	
Return on average equity (after-tax)	-2	3.7	6.5	5.6	3.5	
Commercial banks	-5.7	2.0	0.8	3.7	3.5	
Landesbanken	-8.5	-1.3	-1.0	2.8	-1.6	
Savings banks	4.4	7.1	22.9	9.3	7.3	
Credit cooperatives	5.1	8.0	11.9	11.5	11.0	
Interest margin to gross income	72.5	73.2	72.9	71.5	71.9	
Commercial banks	63	62.7	59.8	61.8	63.0	
Landesbanken	81.5	84.4	94.5	82.3	78.5	
Savings banks	78.6	79.1	79.6	79.4	80.0	
Credit cooperatives	76.9	78.9	78.0	78.2	78.6	
Trading income to gross income		4.5	3.7	5.5	4.9	
Commercial banks		9.1	9.2	9.9	8.0	
Landesbanken		3.9	-4.8	6.7	12.5	
Savings banks		0.2	-0.1	0.1	0.1	
Credit cooperatives		0.0	0.1	0.1	0.0	
Noninterest expenses to gross income	65.1	63.7	63.9	64.2	69.1	
Commercial banks	73.5	72.5	67.9	67.2	72.8	
Landesbanken	51.1	54.7	59.8	59.6	61.8	
Savings banks	66.6	62.8	62.7	65.7	67.2	
Credit cooperatives	68.3	63.7	63.9	65.9	64.6	
Liquidity						
Liquid assets to total short-term liabilities	144.1	137.0	137.9	144.2	140.5	145.5
Commercial banks	131.1	126.2	124.3	129.5	125.1	128.3
Landesbanken	135.9	131.2	144.3	135.8	138.5	139.0
Savings banks	225.7	216.2	210.1	233.6	234.6	238.9
Credit cooperatives	204.2	203.8	208.4	230.6	231.8	233.3
Sensitivity to market risk						
Net open positions in FX to capital	5.3	4.4	4.5	3.9	3.8	
Commercial banks	3.9	2.2	2.3	2.0	1.8	
Landesbanken	5.5	5.5	7.4	4.8	5.3	
Savings banks	9.6	9.1	7.7	7.8	7.7	
Credit cooperatives	7.9	8.1	8.3	8.1	8.0	

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

Table 7. Germany: Additional Financial Soundness Indicators
(In percent, unless otherwise indicated)

	2009	2010	2011	2012	2013	2014
Deposit-taking institutions						
Capital to assets	4.8	4.3	4.4	4.7	5.5	5.6
Commercial banks	5.4	4.1	4.0	4.1	4.9	5.0
Landesbanken	4.7	3.9	4.0	4.4	5.0	4.9
Savings banks	5.2	5.4	5.7	6.9	7.5	7.9
Credit cooperatives	5.2	5.5	5.8	6.3	7.0	7.4
Geographical distribution of loans to total loans						
Germany	72.9	74.9	75.7	76.8	76.8	74.6
EU-member countries	19.5	17.6	16.8	16.0	16.0	15.8
Others	7.6	7.4	7.5	7.2	7.2	9.6
FX loans to total loans	11.5	11.5	11.0	10.5	10.0	11.5
Personnel expenses to noninterest expenses	54.7	52.7	52.0	52.9	51.9	
Commercial banks	49.4	46.3	45.5	46.6	44.7	
Landesbanken	51.0	48.8	47.9	49.6	48.4	
Savings banks	62.4	61.9	61.7	62.7	62.3	
Credit cooperatives	61.9	60.5	59.7	59.6	59.8	
Trading and fee income to total income	27.5	26.8	27.1	28.5	28.1	
Commercial banks	37.0	37.3	40.2	38.2	37.0	
Landesbanken	18.5	15.6	5.5	17.7	21.5	
Savings banks	21.4	20.9	20.4	20.6	20.0	
Credit cooperatives	23.1	21.1	22.0	21.8	21.4	
Funding						
Customer deposits to total (non-interbank) loans	76.5	73.6	73.6	75.7	84.5	86.9
Commercial banks	89.7	85.0	83.1	84.0	104.5	109.2
Landesbanken	34.6	31.5	33.7	33.6	41.6	40.2
Savings banks	109.9	106.9	106.9	107.7	108.5	110.0
Credit cooperatives	122.7	119.0	117.7	118.7	116.9	117.5
Deposits/total assets	67.3	60.8	60.0	61.3	64.6	63.9
Commercial banks	77.2	58.6	58.0	60.3	65.6	63.3
Landesbanken	58.5	52.6	51.4	51.8	55.4	55.1
Savings banks	86.8	86.7	86.7	86.8	86.7	86.7
Credit cooperatives	85.4	85.9	86.3	86.6	86.8	87.0
Interbank assets/total assets	41.3	35.0	34.8	34.3	35.0	33.9
Commercial banks	43.2	32.6	32.7	34.1	35.9	34.8
Landesbanken	47.7	39.1	36.5	34.1	34.8	32.6
Savings banks	26.9	25.3	24.9	22.7	21.2	20.3
Credit cooperatives	29.9	28.2	28.0	26.0	24.2	22.7
Interbank liabilities/total assets	26.7	23.4	21.8	21.7	21.5	21.7
Commercial banks	32.2	24.2	22.5	23.6	22.6	23.6
Landesbanken	30.6	27.0	25.2	24.4	28.0	27.9
Savings banks	18.8	17.4	16.6	15.5	14.1	13.1
Credit cooperatives	15.5	14.1	14.3	14.2	13.2	13.1
Securitized funding/total assets						
Commercial banks						
Landesbanken						
Savings banks						
Credit cooperatives						
Loans/assets	42.1	38.2	37.7	38.4	40.3	39.5
Commercial banks	38.5	27.5	27.3	27.2	30.0	28.1
Landesbanken	36.5	35.0	36.1	38.0	39.5	40.5
Savings banks	59.9	60.9	61.7	62.9	63.7	63.9
Credit cooperatives	56.5	57.4	58.2	59.0	60.6	61.2
Securities holdings/assets	23.5	19.5	18.1	18.0	19.4	19.0
Commercial banks	19.2	12.6	11.0	11.0	13.0	12.8
Landesbanken	23.6	20.1	19.4	19.0	21.7	20.9
Savings banks	26.8	26.6	25.0	25.4	25.2	25.2
Credit cooperatives	27.5	27.5	26.6	27.8	27.4	27.8
Off-balance sheet operations to total assets						
of which: interest rate contracts						
of which: FX contracts						
Spread between highest and lowest interbank rates 1/	15.0	12.8	14.4	11.0	3.0	4.1
Spread between reference loan and deposit rates 2/	342.0	343.0		324.0	326.0	319.0

Table 7. Germany: Additional Financial Soundness Indicators (concluded)
(In percent, unless otherwise indicated)

	2009	2010	2011	2012	2013	2014
Insurance sector						
Solvency ratio, Life	186.2	180.8	177.0	169.0	162.0	
Solvency ratio, Non-life (w/o reinsurance and health insurance)	290.0	314.0	312.0	314.0	317.0	
Return on average equity, Life 3/	9.6	9.8	9.7	9.5	6.1	
Return on average equity, Non-life (w/o reinsurance and health insurance) 3/	4.2	3.3	2.8	3.3	3.8	
Market liquidity						
Average bid-ask spread in the securities market (government bills)	0.0	0.0	0.0	0.0	0.0	0.0
Average bid-ask spread in the securities market (corporate securities)	0.3	0.1	0.3	0.0	0.0	0.0
Corporate sector						
Total debt to equity	108.7	93.5	102.7	91.5	85.9	84.6
Total debt to GDP 4/	146.1	133.7	128.9	129.6	131.1	129.9
Return on invested capital 5/ 6/	7.9	8.6		6.4	9.1	
Earnings to interest and principal expenses 7/	935.8	1021.3	1233.4	1304.0	1339.6	1467.9
Number of applications for protection from creditors 8/	16167	15283	14553	13951	14344	13480
Households						
Household debt to GDP	64.6	62.0	59.8		56.2	55.1
Household debt service and principal payments to income 7/	3.4	3.2	2.9		2.1	1.8
Real estate markets						
Real estate prices, new dwellings 9/	96.5	100.0	106.3	111.6	114.5	120.7
Real estate prices, resale 9/	97.9	100.0	105.0	111.0	114.7	120.6
Real estate prices, new and resale 9/	97.4	100.0	105.4	111.2	114.7	120.6
Real estate prices, commercial property 10/	97.1	100.0	104.8	109.9	117.4	
Residential real estate loans to total loans	16.9	16.8	16.7	17.1	18.3	19.0
Commercial real estate loans to total loans	5.8	5.7	5.7	5.7	5.9	5.8

Source: Deutsche Bundesbank. The authorities provide annual data only and disseminate them once a year.
1/ Spread between highest and lowest three month money market rates as reported by Frankfurt banks (basis points).
2/ Spread in basis points.
3/ Profits after tax devided by equity.
4/ Total debt to corporate gross value added.
5/ Return defined as net operating income less taxes, where net operating income and taxes are compiled according to the FSI Compilation Guide.
6/ Invested capital estimated as balance sheet total less other accounts payable (AF.7 according to ESA 1995).
7/ Excluding principal payments.
8/ Resident enterprises that filed for bankruptcy.
9/ Residential property index (yearly average, 2010=100);
10/ Commercial property prices (yearly average, 2010=100), source: own calculations based on data from BulwienGesa AG, the index is compiled from retail, office, residential and logistic property.

Appendix I. 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	**If the output gap widens significantly, depending on the size and nature of the shock to the economy, invoking the escape clause under the fiscal rule could be appropriate to support German growth.**
II. Reassessment of regional sovereign risk. Financial stress in the euro area could re-emerge triggered by policy uncertainty, faltering reforms, or political unrest.	M	M	
III. Energy prices volatility. Uncertainty about the persistence of the oil supply shock and the underlying drivers of the price decline could undo part of the recent improvement in consumer and business confidence.	H	L	
IV. Geopolitical tensions surrounding Ukraine (which could lead to disruptions in trade and financial and energy markets). In particular, Germany is exposed to an escalation of trade sanctions with Russia given its heavy dependence on Russian gas (40 percent of total consumption).	M	M	**Revisiting Germany's energy strategy may become necessary.**
Risks to the financial sector			
Medium-term risks			
V. Excessive risk-taking associated with the low interest rate environment. The recent strength in pockets of the German housing market could spread nationwide and real estate assets could become overvalued. Faced with falling net interest margin banks may be tempted to adopt (risky) search-for-yield strategies.	L	M	**Take precautionary measures now by strengthening the macroprudential framework and bank supervision. Keep pushing large banks to reduce their high leverage.**
VI. Life insurance 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.	M	L	**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.**

Appendix II. Authorities' Response to Past IMF Policy Recommendations

IMF 2014 Article IV Recommendations	Authorities' Response
Fiscal Policy	
• Increase public investment in infrastructure by 2 percent of GDP over four years especially in areas that enhance growth potential (e.g., transport).	• Plans for additional public investment of some €17 billion (0.6 percent of GDP) have been announced so far taking advantage of a better-than-expected fiscal position.
Financial Sector Policy	
• Banks should keep strengthening their capital position ahead of the completion of the ECB's Comprehensive Assessment.	• Banks' capital ratios have improved, and the largest banks have raised fresh equity (before or after the Comprehensive Assessment). Only a relatively small German bank had a capital shortfall.
• The macroprudential framework needs to be ready as monetary conditions are set to remain accommodative for a prolonged period.	• The Financial Stability Committee has published a document explaining its strategy. It is currently examining what specific instruments to add to the existing toolkit. Based on this examination, the Committee may make a recommendation to the federal government.
• Take measures to address solvency risk in medium-sized life insurance companies	• The July 2014 Life Insurance Reform Act helps strengthen the sector's solvency, but a further decline in interest rates since then has exacerbated the underlying problem posed by interest rate guarantees.
	• (For progress on the implementation of outstanding FSAP recommendations see Annex II)
Structural Reforms	
• Reforms in services sector regulation would boost competition and productivity.	• No significant competition-enhancing reform has taken place in the services sector. The EC-led transparency and mutual evaluation of regulated professions exercise will be finished in January 2016. No conclusions have been drawn yet. The government has initiated a review of the shareholding rules of selected regulated professions.
• Greater clarity about the future energy sector regulatory framework would encourage private investment in the energy infrastructure and beyond and strengthen the outlook.	• In 2014 Parliament approved a revision of the Renewable Energy Sources Act, which aims at containing cost increases for electricity users and reduce uncertainties. A Green Paper to elicit views on how to balance renewable and conventional electrical capacity has been issued as a first step toward future legislation.

Appendix III. Main Outstanding 2011 FSAP Update Recommendations

Recommendation	Status
Continue improving stress testing in the banking and insurance sectors. Rigorously ensure that any institution that displays weaknesses on a forward looking basis strengthens its balance sheet and takes managerial action.	In 2014, 24 large banking groups (21 SSM banks and 3 banking groups later deemed as "less significant") participated in the 2014 Comprehensive Assessment/EBA EU-wide stress test that covered all relevant risk factors except conduct risks, while also reflecting adjustments from an asset quality review. Moreover, in addition to the macroeconomic top-down stress test which has been significantly revised (more elaborated econometric techniques, inclusion of second-round effects), the Bundesbank recently initiated a bottom-up exercise that addresses the profitability of banks in a low-interest rate environment. This survey covers the banks' projected income under their target assumptions and different interest rate scenarios, as well as credit spread and credit risk stress test components. Regarding the insurance sector, the Bundesbank applied a top-down scenario analysis to assess the impact of the 2014 German Life Insurance Reform Act on both the solvency of life insurance companies and financial stability. Furthermore, in 2014 the Bundesbank has developed an inverse stress testing model that captures an abrupt interest rate rise in combination with policy holders lapsing their contracts.
Institute a harmonized and legally binding deposit guarantee of €100,000, backed by adequate prefunding.	Germany is required to transpose the recast Directive on Deposit Guarantee Schemes (Directive 2014/49/EU, the "DGS Directive") into national law by 3 July 2015. The implementing legislation (DGSD-Umsetzungsgesetz – DGSD Implementation Act) has already passed the Bundestag in March 2015. The law will enter into force on 3 July 2015. The hearing of the Bundestag's financial committee was held on 20 February 2015 with the Bundesbank in attendance.
Clarify the interaction between the restructuring fund and the various deposit guarantee and mutual protection schemes.	The BRRD provides that resolution funds may only be used if no other private sector measures, including measures by institutional protection schemes (if institutional protection arrangements are concerned), would prevent the failure of the institution. The role of the German national restructuring fund is redefined by the SRM amending act (Abwicklungsmechanismusgesetz). The national fund will be used regarding firms which are within the scope of the BRRD, but neither within the scope of the

	Delegated Act of the Commission nor within the scope of the SRM.
Finalize specific strategies for exiting from the government support to banks, and require the affected banks to formulate strategic plans.	There are no SoFFin guarantees outstanding (31.12.2014). The amount of SoFFin capital measures was reduced from 17.1 billion euros (31.12.2013) to 16.8 billion euros (31.12.2014). Effective 19 December 2014, the winding up institution FMS Wertmanagement AöR has acquired DEPFA BANK plc, Dublin – together with its subsidiaries – from Hypo Real Estate Holding AG. With regard to the winding up institution Erste Abwicklungsanstalt (EAA), a wind down of its portfolio is gradually ongoing. On 22.02.2015, EAA signed a share purchase agreement regarding the sale of Westdeutsche ImmobilienBank AG, which EAA took over from the former WestLB in 2012, to Aareal Group. The final transfer of the shares of Westdeutsche ImmobilienBank AG to Aareal Group (closing) will take place as soon as all closing conditions (e.g. regulatory approvals) have been fulfilled. The sale of Westdeutsche ImmobilienBank AG will reduce the loans and securities in EAA's portfolio by approx. 10 billion € (the EAA's assets amounted to 80 billion euros as at 30.09.2014).
Develop a comprehensive strategy aimed at improving the efficiency and stability of the banking system: (a) Establish viable business models for the *Landesbanken*; (b) Loosen the regional constraints under which local banks operate; (c) Open up the public banks to private participation; and (d) Strengthen these banks' governance to reduce noncommercial influences.	The reform of the Landesbanken is still under way, with headcount, aggregate balance sheets and RWAs still adapting to the challenging circumstances. During 2014, legacy issues have been further reduced in some cases. Overall, for the Landesbanken sector, capital has improved. Earnings are still at a relatively low level (with significant differences across the individual institutions). Business models - which have also become a focus of attention at the ECB - have to be reviewed to adapt to the new operating and regulatory environments. Sustaining restructuring efforts are key to ensuring the viability of business models. There are no plans to loosen regional constraints on local banks, open up public banks to private participation, and reduce non-commercial influences.

Appendix IV. Public Debt Sustainability Analysis

Public debt declined further in 2014, and is expected to continue to be sustainable, given high primary surpluses and a favorable interest rate-growth differential projected through the medium term. The public debt-to-GDP ratio falls steadily under baseline projections, from 74.7 percent in end 2014 to less than 60 percent in 2020. A negative growth shock represents the largest risk to the debt outlook. Nevertheless, debt would swiftly return to a firm downward path after the shock. 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 and gross financing needs would rise to 12 percent of GDP in the near term. Interest rate or primary balance risks are important but their impact remains limited.

A. Baseline Scenario

Macroeconomic assumptions. Real GDP growth is expected to inch up to 1.8 percent in 2015-16 (non calendar-adjusted rate), supported by the stimulus provided by QE and lower oil prices. In the medium run, growth should converge to its potential level, estimated 1.3 percent. Inflation – based on GDP deflator – is forecasted to temporarily rise to 2 percent in 2015, given a fall in import deflator reflecting lower oil prices and robust wage growth, and converge to lower levels thereafter. With QE pushing down sovereign interest rates at all maturities, the baseline scenario entails a considerably lower average interest rate than one year ago, and dropping from 2.3 in 2014 to about 1½ percent in 2020.

Germany's high level of government debt calls for using the higher scrutiny framework. Public gross debt is still 15 percent of GDP above the indicative DSA threshold for high scrutiny of 60 percent. Debt increased significantly over 2009-2010, 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 were marginally below 15 percent of GDP in 2014, but are expected to fall further 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 2006−2014 is 0.15 percent, suggesting that there is small downward 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. The maximum 3 year adjustment in the cyclically-adjusted primary balance (CAPB) over the projection

period (½ percent of GDP) is not ambitious 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 would not surpass 75 percent of GDP under plausible macro-fiscal shocks, while gross financing needs would remain below 15 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 (detailed results below).

List of shocks and stress tests[1]

- **Growth shock.** Under this scenario, real output growth rates are lower than in the baseline by one standard deviation over 2016-17, i.e. 2.9 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 75 (12) percent of GDP in this case, and converge to 66 (9) percent of GDP by 2020.

- **Primary balance shock.** This scenario examines the effect of a dual shock of lower revenues and rise in interest rate, leading to a cumulative 1.6% deterioration in primary balance over 2016-17 (one standard deviation shock to primary balance). The shock would result in a modest deterioration of debt dynamics.

- **Interest rate shock.** This scenario assumes an increase of 372 basis points increase in debt servicing costs throughout the forecast horizon, mimicking the historical maximum interest rate experienced since 2005. 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 2016-2017 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 highly relevant shock, the

[1] 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.

assumed magnitudes and timing are likely to be on the onerous side. Still, the impact on the debt ratio is relatively limited, and a convergence to 60 percent is still achieved in 2020. Gross financing needs would remain comfortably below 15 percent.

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

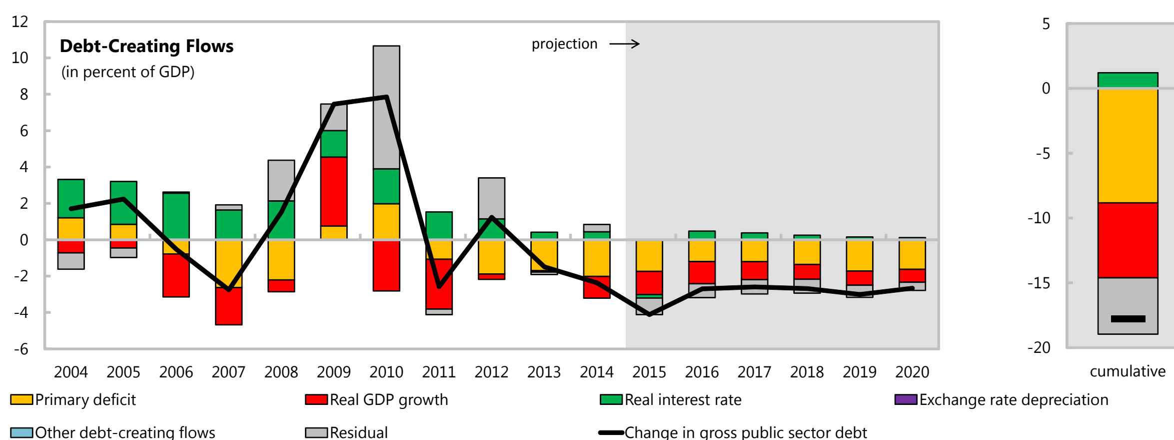
(in percent of GDP unless otherwise indicated)

Debt, Economic and Market Indicators [1/]

	Actual			Projections						As of June 22, 2016		
	2004-2012 [2/]	2013	2014	2015	2016	2017	2018	2019	2020	Sovereign Spreads		
Nominal gross public debt	70.2	77.1	74.7	70.6	67.9	65.3	62.6	59.6	57.0	EMBIG (bp) 3/		0
Public gross financing needs	16.2	15.5	14.2	11.0	10.2	7.9	7.5	6.4	6.4	5Y CDS (bp)		13
Real GDP growth (in percent) [4/]	1.4	0.3	1.7	1.8	1.8	1.5	1.3	1.3	1.2	Ratings	Foreign	Local
Inflation (GDP deflator, in percent)	1.1	2.1	1.7	2.3	1.1	1.2	1.3	1.4	1.4	Moody's	Aaa	Aaa
Nominal GDP growth (in percent)	2.5	2.2	3.4	4.1	2.8	2.6	2.5	2.6	2.6	S&Ps	AAA	AAA
Effective interest rate (in percent) [5/]	4.0	2.6	2.3	2.0	1.8	1.8	1.7	1.6	1.6	Fitch	AAA	AAA

Contribution to Changes in Public Debt

	Actual			Projections							
	2004-2012	2013	2014	2015	2016	2017	2018	2019	2020	cumulative	debt-stabilizing
Change in gross public sector debt	1.8	-1.5	-2.4	-4.1	-2.7	-2.6	-2.7	-3.0	-2.7	-17.8	primary
Identified debt-creating flows	0.5	-1.4	-2.8	-3.2	-1.9	-1.8	-1.9	-2.3	-2.2	-13.4	balance [10/]
Primary deficit	-0.4	-1.7	-2.0	-1.7	-1.2	-1.2	-1.4	-1.7	-1.6	-8.8	-0.6
Primary (noninterest) revenue and grants	42.3	44.0	44.2	44.0	43.5	43.5	43.6	43.8	43.8	262.1	
Primary (noninterest) expenditure	41.9	42.3	42.1	42.3	42.3	42.3	42.2	42.0	42.1	253.3	
Automatic debt dynamics [6/]	1.0	0.3	-0.8	-1.5	-0.7	-0.6	-0.6	-0.6	-0.6	-4.6	
Interest rate/growth differential [7/]	1.0	0.3	-0.8	-1.5	-0.7	-0.6	-0.6	-0.6	-0.6	-4.6	
Of which: real interest rate	1.9	0.4	0.4	-0.2	0.5	0.4	0.3	0.2	0.1	1.2	
Of which: real GDP growth	-0.9	-0.1	-1.2	-1.3	-1.2	-1.0	-0.8	-0.8	-0.7	-5.8	
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	0.4	-0.9	-0.8	-0.8	-0.8	-0.7	-0.4	-4.3	



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 $r - \pi (1+g)$ and the real growth contribution as $-g$.

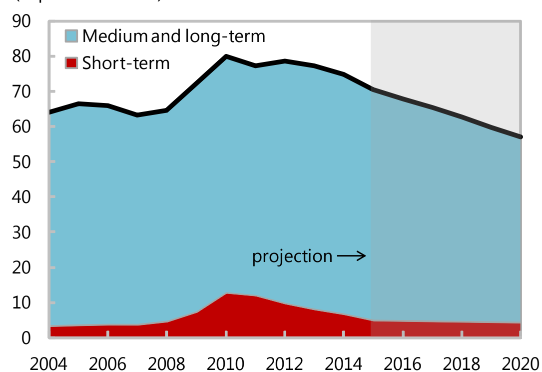
8/ The exchange rate contribution is derived from the numerator in footnote 5 as $ae(1+r)$.

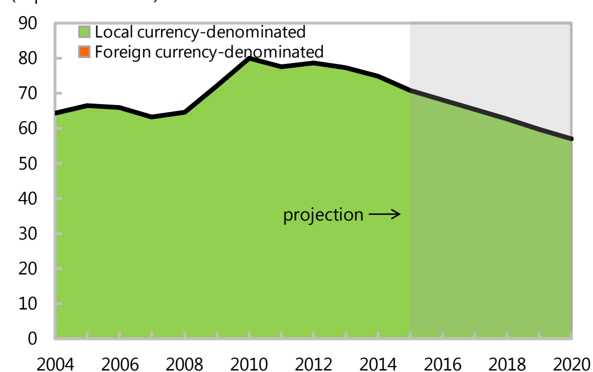
9/ Includes asset changes and interest revenues (if any). For projections, includes exchange rate changes during the projection period.

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

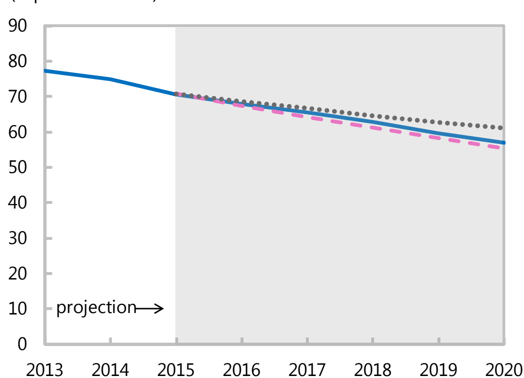
Composition of Public Debt

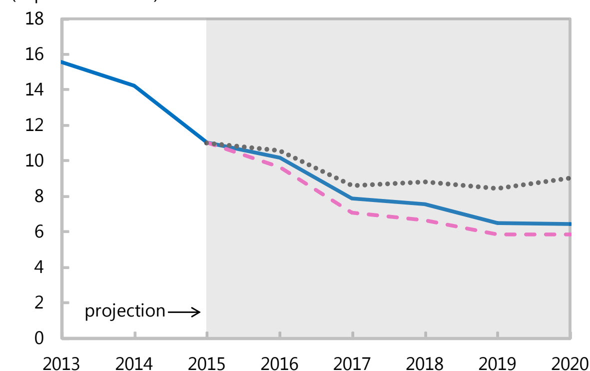




Alternative Scenarios

Baseline Historical Constant Primary Balance





Underlying Assumptions
(in percent)

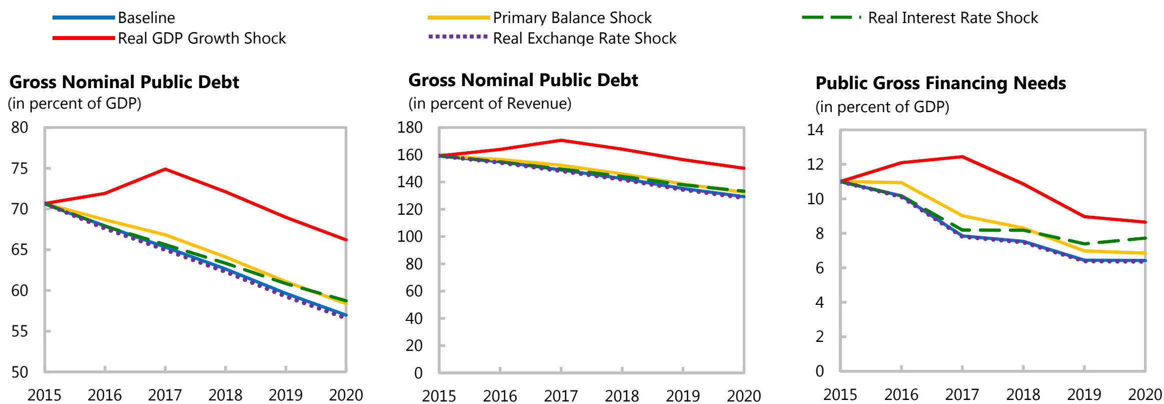
Baseline Scenario	2015	2016	2017	2018	2019	2020
Real GDP growth	1.8	1.8	1.5	1.3	1.3	1.2
Inflation	2.3	1.1	1.2	1.3	1.4	1.4
Primary Balance	1.7	1.2	1.2	1.4	1.7	1.6
Effective interest rate	2.0	1.8	1.8	1.7	1.6	1.6
Constant Primary Balance Scenario						
Real GDP growth	1.8	1.8	1.5	1.3	1.3	1.2
Inflation	2.3	1.1	1.2	1.3	1.4	1.4
Primary Balance	1.7	1.7	1.7	1.7	1.7	1.7
Effective interest rate	2.0	1.8	1.8	1.7	1.7	1.6

Historical Scenario	2015	2016	2017	2018	2019	2020
Real GDP growth	1.8	1.3	1.3	1.3	1.3	1.3
Inflation	2.3	1.1	1.2	1.3	1.4	1.4
Primary Balance	1.7	0.9	0.9	0.9	0.9	0.9
Effective interest rate	2.0	1.8	2.1	2.1	2.1	2.2

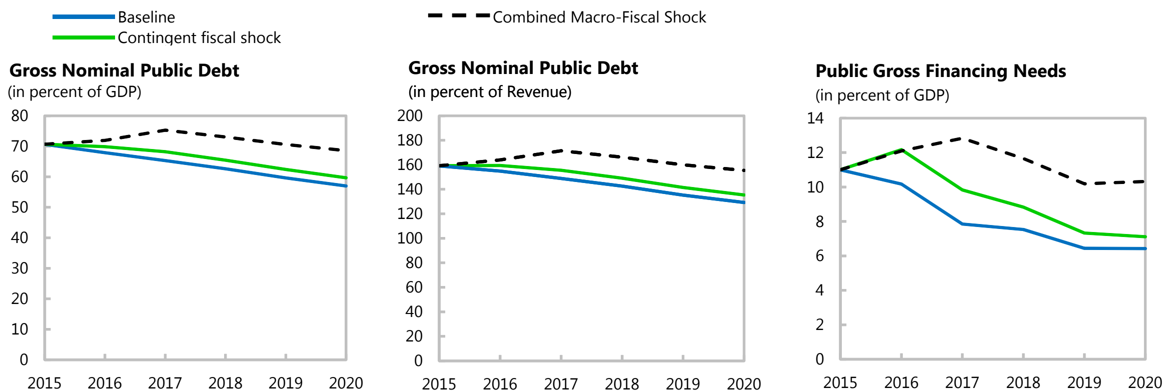
Source: IMF staff.

Germany Public DSA - Stress Tests

Macro-Fiscal Stress Tests



Additional Stress Tests



Underlying Assumptions
(in percent)

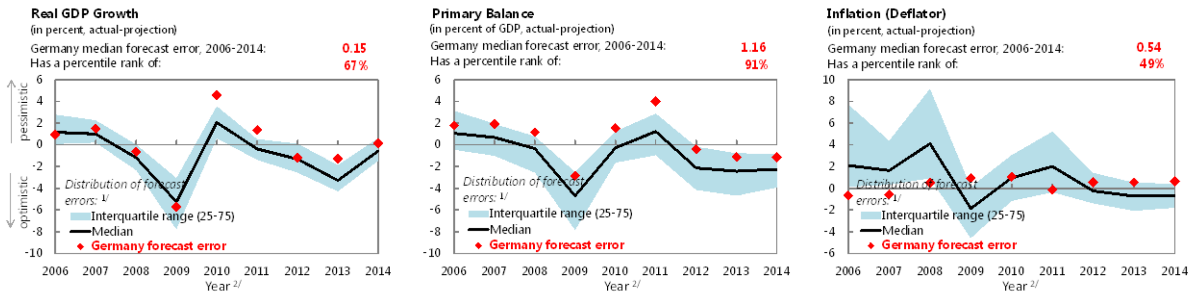
	2015	2016	2017	2018	2019	2020
Primary Balance Shock						
Real GDP growth	1.8	1.8	1.5	1.3	1.3	1.2
Inflation	2.3	1.1	1.2	1.3	1.4	1.4
Primary balance	1.7	0.4	0.4	1.4	1.7	1.6
Effective interest rate	2.0	1.8	1.8	1.7	1.7	1.6
Real Interest Rate Shock						
Real GDP growth	1.8	1.8	1.5	1.3	1.3	1.2
Inflation	2.3	1.1	1.2	1.3	1.4	1.4
Primary balance	1.7	1.2	1.2	1.4	1.7	1.6
Effective interest rate	2.0	1.8	2.3	2.4	2.5	2.6
Combined Shock						
Real GDP growth	1.8	-1.1	-1.4	1.3	1.3	1.2
Inflation	2.3	0.4	0.5	1.3	1.4	1.4
Primary balance	1.7	-0.3	-1.9	1.4	1.7	1.6
Effective interest rate	2.0	1.8	2.3	2.5	2.7	2.8

	2015	2016	2017	2018	2019	2020
Real GDP Growth Shock						
Real GDP growth	1.8	-1.1	-1.4	1.3	1.3	1.2
Inflation	2.3	0.4	0.5	1.3	1.4	1.4
Primary balance	1.7	-0.3	-1.9	1.4	1.7	1.6
Effective interest rate	2.0	1.8	1.8	1.8	1.7	1.7
Real Exchange Rate Shock						
Real GDP growth	1.8	1.8	1.5	1.3	1.3	1.2
Inflation	2.3	1.5	1.2	1.3	1.4	1.4
Primary balance	1.7	1.2	1.2	1.4	1.7	1.6
Effective interest rate	2.0	1.8	1.8	1.7	1.6	1.6

Source: IMF staff.

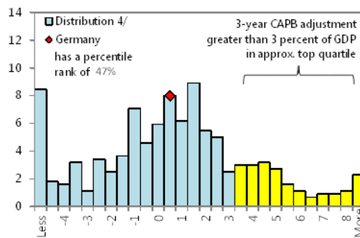
Germany Public DSA - Realism of Baseline Assumptions

Forecast Track Record, versus surveillance countries

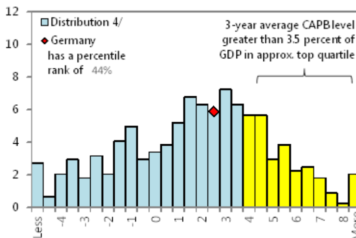


Assessing the Realism of Projected Fiscal Adjustment

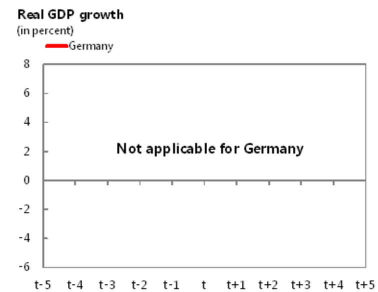
3-Year Adjustment in Cyclically-Adjusted Primary Balance (CAPB)
(Percent of GDP)



3-Year Average Level of Cyclically-Adjusted Primary Balance (CAPB)
(Percent of GDP)



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.

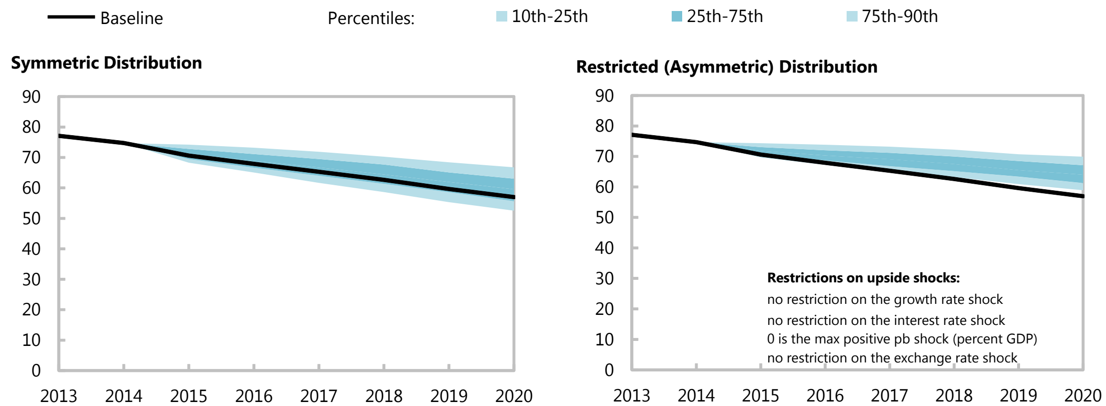
Germany Public DSA Risk Assessment

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

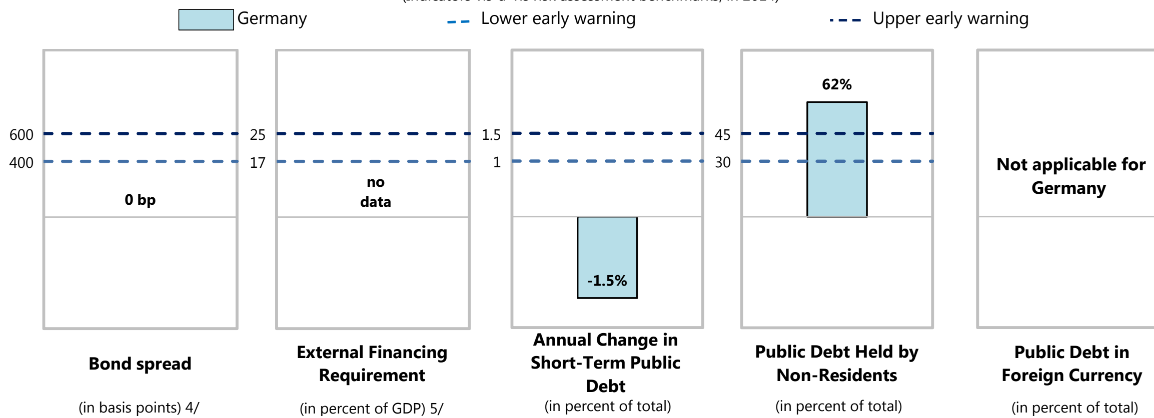
Evolution of Predictive Densities of Gross Nominal Public Debt

(in percent of GDP)



Debt Profile Vulnerabilities

(Indicators vis-à-vis risk assessment benchmarks, in 2014)



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, 24-Mar-16 through 22-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.

Appendix V. External Sector Report Country Page: Germany

Foreign asset and liability position and trajectory	**Background**. Germany's positive net international investment position (NIIP) was reduced to close to balance in the years following reunification. Since the beginning of the millennium, the NIIP recovered and reached 33 percent of GDP at end-2014. 1/ The pace of NIIP build-up has fallen short of the cumulated current account surpluses but returns (excluding revaluations) earned on assets have been higher than those paid on liabilities since 2004. The NIIP is expected to continue to grow as the CA surplus remains sizable in the medium term. German financial corporations have a large positive net portfolio investment position (38 percent of GDP), while the general government—in part reflecting Germany's safe haven status—has a large negative position (40 percent of GDP). During the crisis, the Bundesbank accumulated large net claims on the Eurosystem (Target2), which stood at 16 percent of GDP at end-2014. **Assessment**. Safe haven status and the strength of its current external position limit risks.
Current account	**Background**. The current account has averaged 6.2 percent of GDP over the last decade and reached 7.6 percent of GDP in 2014, a 0.8 pp. increase relative to 2013. Most of the increase is accounted for by an improvement in the gas and oil balance, with about equal contributions from declines in volumes and prices. This improvement is expected to strengthen further in 2015, as energy prices should remain lower than in 2014. REER depreciation since mid-2014 is expected to put further upward pressure on the CA, though it will partly offset the decline in the oil price. On a geographical basis, the surplus vis-à-vis stressed countries in the euro area remained stable in 2014, after declining substantially in recent years. The saving-investment balance of the non-financial corporations and the government each contributed about ½ percent of GDP to the improvement in the current account in 2014 relative to 2013. **Assessment**. The cyclically-adjusted current account balance stood at 8.1 percent of GDP in 2014, which is 3-5 percentage points of GDP stronger than the value implied by fundamentals and desirable policies. Staff assesses the norm at 3-5 percent of GDP. The norm implied by the EBA model is 3.9 percent. 2/
Real exchange rate	**Background**. As of May 2015, the CPI based real exchange rate has depreciated in effective terms by about 6 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 expected monetary tightening in the U.S. and the implementation of quantitative easing in the euro area. Despite the recent depreciation trend, various measures of REER were 0-3.5 percent more appreciated in 2014 than in 2013 on an annual average basis. **Assessment**. Staff's assessment for 2014 is of a REER undervaluation of 5–15 percent. The EBA REER Level model yields an undervaluation of about 16 percent. The undervaluation implied by the CA regression model using standard trade elasticities is 7-12 percent. 3/
Capital and financial accounts: flows and policy measures	**Background**. Before the crisis Germany exported capital primarily in the form of bank outflows. During the crisis, capital flow reversals particularly affected portfolio investment. In 2014, net portfolio and direct investment flows constituted about ½ and 1/3 of the capital and financial account balance, respectively. The stock of Germany's net (Target2) claims on the Eurosystem went down from a peak of €750 billion in August 2012 to €532 billion in April 2015. **Assessment**. Lower exposure to the Eurosystem and a resumption of private capital outflows are associated with reduced euro area financial stress and a partial reversal of euro area financial fragmentation.
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.

Overall Assessment

Overall Assessment:

Germany's external position in 2014 was substantially stronger than implied by medium-term fundamentals and desirable policy settings. Subsequent developments as of May 2015, notably the energy import price declines and the depreciation of Germany's REER, point toward a further strengthening of the external position.

Recent energy price declines and the depreciation of the euro, assuming these trends are not reversed, are expected to put an upward pressure on the current account in 2015.

Staff projects some rebalancing in the medium run due to stronger wage growth relative to euro area trading partners and higher domestic demand.

Potential policy responses:

Policies should generate positive demand spillovers to the rest of the euro area and focus on boosting growth potential and reducing the German current account surplus. Policy priorities include higher public investment, service sector and energy policy reform.

	Germany (continued)
Technical Background Notes	1/ Germany's balance of payments statistics, including the NIIP, are not comparable to those reported in last year's country page due to the transition to BPM6. 2/ The rapidly-aging population contributes 3.3 percentage points to the estimated EBA CA norm of 3.9 percent of GDP. Most of the EBA-estimated gap for 2014 reflects the regression's residual rather than gaps in the policies included in the EBA model. 3/ The EBA REER Index model has an unusually poor fit for Germany, predicting a depreciating trend that has not occurred. The result for 2014 is an estimate of *over*valuation (of 7.3 percent) that has been discarded from the assessment as implausible, including in light of the assessment that the CA is too strong.

INTERNATIONAL MONETARY FUND

GERMANY

June 22, 2015

STAFF REPORT FOR THE 2015 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

Prepared By European Department

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FUND RELATIONS

(As of May 31, 2015; unless specified otherwise)

Mission: April 29– May 11, 2015 in Berlin, Bonn, and Frankfurt. The concluding statement of the mission is available at http://www.imf.org/external/np/ms/2015/051115.htm.

Staff team: Ms. Detragiache (Head), Ms. Pereira, Mr. Vandenbussche (both EUR), and Ms. Boz (RES).

Country interlocutors: Bundesbank President Weidmann, senior representatives at the Chancellery, the Ministry of Finance, the Ministry of Economic Affairs and Energy, the Ministry of Labor, the Bundesbank, BaFin, and the European Central Bank. Mr. Meyer, Alternate Executive Director, also participated in the discussions. Additional meetings took place with industry, think tanks, trade unions, and financial market participants.

Fund relations: The previous Article IV consultation discussions took place during May 2014 and the staff report was discussed by the Executive Board on July 14, 2014. The Executive Board's assessment and staff report are available at http://www.imf.org/external/pubs/cat/longres.aspx?sk=41766.0.

Membership Status: Joined August 14, 1952; Article VIII.

General Resources Account:	**SDR Million**	**Percent of Quota**
Quota	14,565.50	100.00
Fund holdings of currency	12,597.29	86.49
Reserve position in Fund	1,968.23	13.51
Lending to the Fund	2,563.23	

SDR Department:	**SDR Million**	**Percent of Allocation**
Net cumulative allocation	12,059.17	100.00
Holdings	11,930.87	98.94

Outstanding Purchases and Loans: None

Financial Arrangements: None

Projected Payments to Fund (SDR Million; based on existing use of resources and present holdings of SDRs, as of May 31, 2015):

	Forthcoming				
	2015	2016	2017	2018	2019
Principal					
Charges/Interest	0.03	0.27	0.27	0.27	0.27
Total	0.03	0.27	0.27	0.27	0.27

1/ When a member has overdue financial obligations outstanding for more than three months, the amount of such arrears will be shown in this section.

Exchange Rate Arrangement

Germany's currency is the euro, which floats freely and independently against other currencies.

Germany is an Article VIII member and maintains an exchange system free of restrictions on payments and transfers for current international transactions. It maintains measures adopted for security reasons, which have been notified to the Fund for approval in accordance with the procedures of Decision 144 and does so solely for the preservation of national or international security.

Anti-Money Laundering/Combating the Financing of Terrorism (AML/CFT)

Germany was last assessed against the AML/CFT standard in 2009. While generally comprehensive, Germany's AML/CFT framework suffered from some shortcomings inter alia with respect to the money laundering and terrorist financing offenses, and AML/CFT preventive measures (including the reporting of suspicious transaction requirements, and customer due diligence, CDD, requirements). The authorities have taken a number of steps to remedy most of the main technical deficiencies identified, and in June 2014, the FATF recognized that Germany had made sufficient progress to exit the regular follow-up process. Notable progress includes the broadening of the scope of the money laundering offense amending the reporting requirement (e.g., threshold for reporting and terminology), and strengthening of some CDD requirements (including with respect to the identification of beneficial owners), as well as of sanctions for noncompliance with AML/CFT preventive measures. Further guidance for the banking sector on the implementation of AML/CFT requirements was issued and, in 2012, BaFin ordered sixteen financial institutions to undergo a special audit focused on the application of AML/CFT measures to their foreign branches and subsidiaries. The audits revealed occasional problems in the identification of the beneficial owners, and some difficulties in group-wide sharing of relevant information due to some countries' strict data protection rules. Despite the important progress made, some technical deficiencies remain (e.g., with respect to the criminalization of self-laundering and of terrorist financing, and the tracing and freezing of terrorist funds). The next assessment of Germany's AML/CFT framework is tentatively scheduled to take place in 2020.

STATISTICAL ISSUES

I. Assessment of Data Adequacy for Surveillance
General: Data provision is adequate for surveillance.

National Accounts

Germany adopted the *European System of Accounts 2010 (ESA2010)* in September 2014. The 2005 ROSC Data Module mission found that the macroeconomic statistics generally follow internationally accepted standards and guidelines on concepts and definitions, scope, classification and sectorization, and basis for recording. However, the sources for estimating value added for a few categories of service industries could be improved. A direct source for quarterly changes in inventories, which is an important indicator of changes in GDP over the business cycle, is lacking. Extrapolations of changes in inventories are based on the difference between the monthly production index and turnover index in manufacturing. There is no systematic, proactive process to monitor the ongoing representativeness of the samples of local units and products between rebases of the producer price index.

Government Accounts

Comprehensive data reporting systems support the accuracy and reliability of the government finance statistics. However, these data are based on cash accounting systems, although documentation exists to explain the differences between the general government data in the ESA2010 classification and the general cash data on an administrative basis; Germany publishes—through Eurostat—general government revenue, expenditure, and balances on an accrual basis on a quarterly basis (*ESA2010*) and submits annual data for publication in the *Government Financial Statistics Yearbook,* in *GFSM 2001* format. Monthly data are only disseminated on a cash-basis.

Balance of Payments Accounts

The Bundesbank compiles the balance of payments in close cooperation with the Federal Statistical Office. Balance of payments, International Investment Position statistics, and related cross-border statistics are compiled according to the sixth edition of the *Balance of Payments and International Investment Position Manual* (*BPM6*), and the legal requirements of the ECB and Eurostat.

Financial Soundness Indicators (FSIs)

The German authorities compiled a comprehensive set of FSI data and metadata. Of the 40 FSIs, Germany reports all except net foreign exchange exposure to equity (I31) and residential real estate prices (I37). Even though Germany reports all of the 12 core FSIs, six FSIs are reported on an annual basis only: (i) NPL Net of Provisions to Capital, (ii) NPL to Total Gross Loans, (iii) Return on Assets, (iv) Return on Equity, (v) Interest Margin to Gross Income, and (vi) Non-Interest Expense to Gross Income. Plans are already underway to change the legal basis for the periodicity of deposit taking institutions' reporting requirements. In addition, the quality of data on bank exposures submitted to the BIS needs to be improved, including provision of the data on ultimate risk basis for advanced countries.

II. Data Standards and Quality	
Subscriber to the Fund's Special Data Dissemination Standards (SDDS) since December 2, 1996, and to SDDS Plus since February 2015.	Data ROSC is available.

Germany: Table of Common Indicators Required for Surveillance

(As of June 1, 2015)

	Date of latest observation	Date received	Frequency of Data[7]	Frequency of Reporting[7]	Frequency of Publication[7]	Memo Items	
						Data Quality–Methodological soundness[9]	Data Quality–Accuracy and reliability[10]
Exchange Rates	Current	Current	D	D	D		
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[1]	April 15	May 15	M	M	M		
Reserve/Base Money[2]	April 15	May 15	M	M	M		
Broad Money[2]	April 15	May 15	M	M	M		
Central Bank Balance Sheet	April 15	May 15	M	M	M		
Consolidated Balance Sheet of the Banking System	April 15	May 15	M	M	M		
Interest Rates[3]	June 15	June 15	M	M	M		
Consumer Price Index	April 15	May 15	M	M	M		
Revenue, Expenditure, Balance and Composition of Financing[4] – General Government[5]	Q4 14	April 15	Q	Q	Q	LO, LO, LO, O	O, O, O, O, O
Stocks of General Government and Government-Guaranteed Debt[6]	December 14	April 15	A	A	A		
External Current Account Balance	March 15	May 15	M	M	M	O, O, LO, O	O, O, O, O, O
Exports and Imports of Goods and Services	March 14	May 14	M	M	M		
GDP/GNP	Q1 15	May 15	Q	Q	Q	O, O, O, O	LO, O, O, O, O
Gross External Debt	Q4 14	March 15	Q	Q	Q		
International Investment Position[7]	Q4 14	May 15	Q	Q	Q		

[1] Includes reserve assets pledged or otherwise encumbered as well as net derivative positions.
[2] Pertains to contribution to EMU aggregate.
[3] Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes, and bonds.
[4] Foreign, domestic bank, and domestic nonbank financing.
[5] The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.
[6] Including currency and maturity composition
[7] Includes external gross financial asset and liability positions vis-a-vis nonresidents.
[8] Daily (D); weekly (W); monthly (M); quarterly (Q); annually (A); irregular (I); and not available (NA)
[9] Reflects the assessment provided in the data ROSC (published on January 18, 2006, and based on the findings of the mission that took place during July 5–20, 2005) for the dataset corresponding to the variable in each row. The assessment indicates whether international standards concerning methodological soundness, namely, (i) concepts and definitions, (ii) scope, (iii) classification/sectorization, and (iv) basis for recording are fully observed (O); largely observed (LO); largely not observed (LNO); not observed (NO); and not available (NA).
[10] Same as footnote 9, except referring to international standards concerning accuracy and reliability, namely, (i) source data, (ii) assessment of source data, (iii) statistical techniques, (iv) assessment and validation of intermediate data and statistical outputs, and (v) revision studies.

Statement by the Staff Representative on Germany
Executive Board Meeting
July 10, 2015

This statement provides information that has become available since the issuance of the staff report. The information does not alter the thrust of the staff appraisal.

Following the expiration of the European program with Greece last week, the risk of renewed stress in the euro area has increased. So far, the reaction of financial markets has been relatively muted and contagion has not been significant. The yield on the 10-year Germany government bond has fallen by 26 basis points since the issuance of the staff report, reflecting safe haven effects. The DAX stock market index has declined by 6 percent, with bank stocks especially hard hit. CDS spreads for the largest four banks have increased by 14 basis points on average.

For Germany, the main short-term risk is that turmoil will spread and undermine confidence in the economic expansion. This would likely weaken private consumption and delay the projected recovery in private investment. Successful management of this risk will depend on the timely deployment of the available ECB policy tools. In the medium-term, there is a need for a concerted effort to accelerate integration within the euro area and strengthen firewalls. The upcoming euro area Article IV report will elaborate on these policy challenges.

The Financial Stability Committee (FSC) has recommended an expansion of the German macroprudential toolkit, in line with staff's advice. Following its June 30, 2015 meeting, the FSC recommended that the Federal government initiate legislation to give the Federal Financial Supervision Authority (Bafin) authority to introduce measures constraining mortgage loan eligibility, such as limits of loan-to-value ratios, debt-to-income ratios, and debt-service-to-income ratios, as well as minimum amortization requirements. The Committee underscored that activation of such instruments is not envisaged at the moment.

Statement by Steffen Meyer, Alternate Executive Director for Germany
Executive Board Meeting
July 10, 2015

1. I would like to convey my authorities' gratitude for productive and insightful discussions. My authorities found the assessment candid, comprehensive, and well-balanced. It is highly appreciated that staff has reached out to a broad range of stakeholders during the consultations. The authorities' views have been well-documented in the staff report so that I can focus on a couple of key issues.

2. The German economy is in good shape as evidenced by strong labor market and wage developments, elevated consumer sentiment, healthy public and private balance sheets, and very favorable financing conditions. The German government plans to prudently build on these favorable developments of the recent years while ensuring that the progress achieved is not jeopardized. My authorities share the thrust of the staff appraisal and agree in particular that the challenge is to further strengthen productivity growth and improve the conditions for stronger private investment.

Recent Economic Developments and Outlook

3. Staff's growth projection of 1.6 percent this year and 1.7 percent next year is in line with my authorities' view. This is true for the growth rates as well as for the composition of growth. However, when discussing current economic developments and the outlook, I would put more emphasis on favorable domestic conditions, notably the very strong labor market. As staff rightly notes, there is no doubt that the economy has benefitted from external factors such as the drop in crude oil prices, the depreciation of the euro, and the recovery in export markets. At the same time, robust real wage growth and higher employment have bolstered consumption while investment has picked up in a context of solid capacity utilization and good business sentiment. As a consequence, growth in 2015 and 2016 is expected to be mainly driven by private consumption and to substantially outpace potential output growth of around 1 ¼ percent.

Fiscal Policy

4. Against the favorable economic background, the German government will continue to implement its strategy of prudent, medium-term oriented, and growth-friendly fiscal policies. My authorities see Germany as an important anchor of stability within the euro area and the EU and for this reason plan to maintain the solid fiscal position keeping EU and national fiscal rules with a safety margin. This means concretely that the government will increase public investment while maintaining balanced budgets.

5. Balanced budgets will help to further reduce the government debt ratio (which is still substantially above the 60% "Maastricht" ceiling), safeguard the fiscal position against increasing interest rates (which have already started to rise from historically low levels), and prepare for upcoming demographic challenges (that will kick in heavily at the end of this

decade). Also from a cyclical point of view an additional fiscal stimulus is not advisable, and not least the IMF, for example in the latest Fiscal Monitor, is advocating a symmetric fiscal policy over the business cycle and the need to build buffers in good times.

6. Within the fiscal envelope, the German government has committed to increasing public expenditures in particular in education, research, and infrastructure. Decisions have been taken to increase expenditure in these areas by around €44 billion until 2019.

7. With regard to staff's recommendation to even further expand public investment, I would like to highlight the following: While there is a need for public investment, in particular at the municipal level and in transport infrastructure, the overall public infrastructure in Germany is still considered to be very good in international comparisons. The challenge is to maintain infrastructure quality and to expand it where there is a clear need. To do this and in order to use funds efficiently, a case by case approach for projects is needed. For one, the administrative capacities for planning and implementing investment projects are limited. Further to this, high short-term pressure to spend public funds carries the risk of fund misallocation. In this respect, it is more a question of the need for structural or institutional approaches to strengthen resources and knowledge transfer for the implementation of investment projects. Against this background and in line with staff's advice, the German government currently assesses proposals to create a service agency for municipalities to help them with planning, procuring and managing infrastructure projects and to strengthen investment efficiency.

External Assessment

8. I welcome the detailed external assessment. The refined external balance analysis better captures demographic effects which is welcome. It is worth emphasizing, however, that the model leaves a substantial degree of ambiguity in the case of Germany. The unexplained residual remains significantly larger than any "policy gaps" (about 3 percentage points compared to "fiscal policy gaps" of 0.9 percentage points in other countries and 0.6 percentage points in Germany). There are many possible explanations for the large residuals, such as specific shocks to the savings rate or to world demand for German exports. Furthermore, despite the general uncertainty around attempts to estimate external positions implied by medium-term fundamentals or equilibrium REER, the estimated undervaluation of the REER seems to be too pronounced in my view. In addition, I would like to stress that the German current account surplus is likely due to a complex set of factors and the result of market processes and not the result of distortions or targeted policy measures of the German government.

9. Simple explanations or recommendations how to reduce the current account surplus would therefore be misleading. Staff simulations of the spillover effects of directly targeting higher wages and similar previous studies on the effects of fiscal expansion through lower taxes or higher consumption spending are helpful in this regard. They confirm that positive spillovers are very limited or can become even negative if they result in lower employment and weaker economic activity in Germany. In contrast staff simulations show that policies fostering potential growth would also generate meaningful positive outward spillovers not

least within the EU and the euro area. Against this backdrop, my authorities would like to put emphasis on market-driven rebalancing.

10. The recent increase of the current account is driven to a large extent by lower oil prices. Looking ahead, given the fact that Germany enjoys solid growth and strong nominal and real wage growth, which is further supported by policies like the introduction of a federal minimum wage and public investment initiatives, my authorities expect a decrease of the current account surplus over the medium term and a continuation of the rebalancing process.

Strengthening Potential Output

11. My authorities agree with the staff assessment that potential output growth in Germany was more or less unaffected by the global financial crisis. In addition, they broadly agree with the stylized evolution of potential growth and its sub-components, with a declined growth contribution of capital compensated by a larger contribution of labor, thanks to a higher participation rate and strong net migration.

12. In the medium to long term population aging will weigh on potential output growth in Germany. This notwithstanding, assuming constant contributions of trend factor productivity and fixed capital formation probably overstates the slowdown in potential growth. According to my authorities' assessment, for instance, trend factor productivity could well be more dynamic in the medium term than currently observed, as migrants are currently unlikely to already tap their full potential on the labor market. As tasks can be performed more and more efficiently over time, language skills improve and mismatch declines, aggregate productivity is likely to accelerate again in the longer term and should contribute more strongly to potential growth.

13. Nonetheless, my authorities strongly agree that policies should be implemented to strengthen potential growth. Staff's suggestions on service sector reform, increasing labor market participation and reducing uncertainty regarding the energy transition point in the right direction.

14. The German government agrees that there is some scope for further service sector deregulation, e.g. in professional services, to increase efficiency, lower entry barriers and reduce red tape. This can contribute to greater competitiveness and better structural framework conditions for investment. However, in the German government's opinion, it is necessary to find the right balance as it should still be possible to retain justified and appropriate regulations which, for example, guarantee the quality of a service, ensure adequate consumer protection, or serve a social or health purpose. Currently the government is examining – inter alia within the context of the Transparency Initiative at EU level – whether the applicable regulations fulfill these purposes or whether other measures could achieve this goal in a better or more efficient manner.

15. With regard to rail transportation the "Act to Strengthen Competition in the Rail Sector" will further promote competition in the rail markets, provide incentive to boost efficiency, and help create a single European market. It should be noted that – in spite of a

mixed picture depending on the individual transport service segments - the share of competitors to the incumbent operator in the total turnover of railway undertakings has increased steadily in recent years.

16. My authorities fully agree with staff on the importance to successfully manage the energy transformation. They see that the Renewable Energy Act from 2014 contributes to put the reforms on sound footing and improves the planning reliability for investors. It also contributes to dampen the cost increases for final users of electricity. However, my authorities agree that this is only a first step and further measures have to be taken. Therefore the government has started to implement further measures such as in the fields of grid expansion, security of supply, and the future of the electricity market.

17. Increasing labor market participation is an important objective. Notwithstanding the fact that female labor participation in Germany is one of the highest among advanced economies, my authorities agree that the sufficient and high-quality provision of child care facilities remains a priority. The German government is already providing a total of €5.95 billion in support to the Länder and municipalities for the expansion of child care facilities for children under three. Starting in 2015, it will provide €845 million annually towards ongoing operating costs of child day care, as well as an additional €100 million each year for 2017 and 2018. Disincentives of the tax system are certainly an issue, with social security contributions and free co-insurance of non-working family members often being more relevant than the treatment of couples in the income tax code.

18. Overall, the increase of female labor supply will not be sufficient to address the effects of adverse demographics. Measures to increase the labor force by increasing the effective retirement age and integrating highly skilled migrants can also help to tackle possible future labor supply shortages.

Financial Sector

19. My authorities are very alert to potential risks associated with low interest rates. Banks not directly supervised by the ECB have been asked to run bottom-up stress tests, which will enable supervisory analysts to get a comprehensive picture how the earning situation could evolve in the next five years. The authorities and banks are aware that, depending on the specific case, low profitability warrants corrective action. Mergers can be one option to cut costs. Recent evidence points to the fact that the consolidation process among saving banks and cooperative banks is ongoing. In addition branch networks have been further reduced. And announcements of two large banks to reduce the size of their branch networks at a larger scale indicate that this process is still not over yet.

20. My authorities agree that house price developments should be monitored closely while signs of overvaluation are limited to big cities so far. They fully concur with staff that the macro-prudential toolkit available as of today may not be sufficient to address financial stability risks emanating from the residential mortgage market and should be further developed. In line with this assessment, last week the German FSC recommended that the federal government provide for the legal foundations for applying additional macroprudential

tools to regulate loans for the construction or purchase of residential real estate. Specifically and fully in line with international as well as European practices, it recommends to create the option of activating LTV, DTI, DSTI, and an amortization requirement should such restrictions be deemed necessary to safeguard financial stability in Germany. Also, my authorities stepped up efforts to collect data from commercial lenders which will help to apply and calibrate macro-prudential measures.

21. My authorities agree with staff that a persistent low-interest environment is a source of risk for the stability of German life insurers. They also concur that Solvency II will make this challenge more salient. Regarding measures to increase the resilience of the insurance sector, my authorities agree that insurers should reinforce their capital buffers, manage the policy holders' profit participation share and reduce the dependence on interest rate risk by means of selling more policies with a flexible guaranteed return or no guaranteed return at all. Concerning the Life Insurance Reform Act, my authorities agree in general with staff's evaluation that this act is an important contribution to improve the resilience of life insurers and thus the stability of the life insurance sector as a whole.