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FOR AGENDA

SM/14/184

June 27, 2014

To: Members of the Executive Board

From: The Secretary

Subject: **Germany—Staff Report for the 2014 Article IV Consultation**

Attached for consideration by the Executive Directors is the staff report for the 2014 Article IV consultation with Germany, which is tentatively scheduled for discussion on **Monday, July 14, 2014**. Unless an objection from the authorities of Germany is received prior to the conclusion of the Board's consideration, the document will be published. Any requests for modifications for publication are expected to be received two days before the Board concludes its consideration.

Questions may be referred to Ms. Detragiache (ext. 36376), Mr. Elekdag (ext. 34835), and Mr. Vandenbussche (ext. 36676) in EUR.

Unless the Documents Section (ext. 36760) is otherwise notified, the document will be transmitted, in accordance with the procedures approved by the Executive Board and with the appropriate deletions, to the European Central Bank forthwith; to the WTO Secretariat on Tuesday, July 8, 2014; and to the Caribbean Development Bank, the European Commission, and the Organisation for Economic Cooperation and Development, following its consideration by the Executive Board.

This document, together with a supplement providing an informational annex, will shortly be posted on the extranet, a secure website for Executive Directors and member country authorities. The supplement, which is not being distributed in hard copy, will also be available in the Institutional Repository; a link can be found in the daily list (http://www-int.imf.org/depts/sec/services/eb/dailydocumentsfull.htm) for the issuance date shown above.

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INTERNATIONAL MONETARY FUND

GERMANY

STAFF REPORT FOR THE 2014 ARTICLE IV CONSULTATION

June 26, 2014

KEY ISSUES

Context:

- Germany fundamentals are sound: balance sheets are generally healthy, unemployment is at a historic low, and the fiscal position is strong.
- While a recovery is underway, medium-term growth prospects are subdued and the current account surplus remains high. The economy also faces a still weak international environment, lingering uncertainty (including about future energy costs), and fast approaching adverse demographic changes.
- Germany could do more to increase its growth, thus strengthening its role as an engine of euro area recovery.

Policy recommendations:

- Germany has the fiscal space to finance an increase in needed public investment, particularly in the transport infrastructure. Unlike public consumption, this would durably raise German output and have measurable growth spillovers on the rest of the euro area.
- Further reforms in services sector regulation would boost competition and productivity.
- Greater clarity about the future energy sector regulatory framework would encourage private investment in the energy infrastructure and beyond and strengthen the outlook.
- Decisions on the future level of the minimum wage should take into account the employment effects in certain regions.
- Banks should keep strengthening their capital position ahead of the completion of the ECB's Comprehensive Assessment.
- The macroprudential framework needs to be ready as monetary conditions are set to remain accommodative for a prolonged period.

Approved By
Ranjit Teja and Kalpana Kochhar

Discussions took place in Berlin, Bonn, and Frankfurt during May 8-19. The staff team comprised Enrica Detragiache (head), Selim Elekdag, Faezeh Raei, and Jérôme Vandenbussche (all EUR). The team was supported from headquarters by Mariza Arantes and Morgan Maneely (both EUR) and Vanessa Le Leslé (SPR).

CONTENTS

ANNEXES

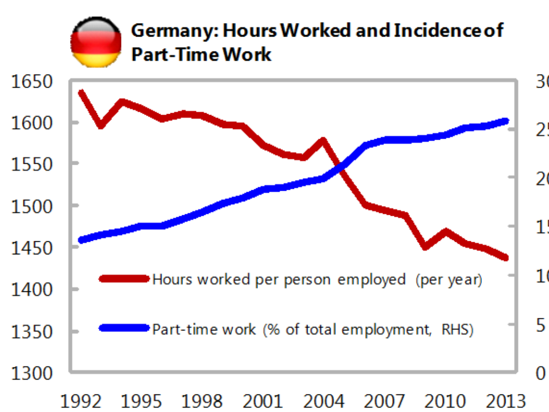
APPENDIX

RECENT ECONOMIC DEVELOPMENTS AND OUTLOOK

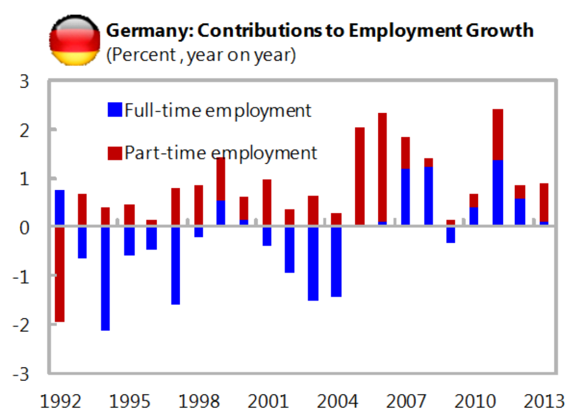
A. Recovery in the Euro Area: Germany Ahead of the Pack

1. **A recovery is under way, led by domestic demand.** Real GDP has been rising since the second quarter of 2013, and for the year as a whole growth was 0.5 percent (Figure 1), versus a 0.8 percent contraction in the rest of the euro area. Growth in the first quarter of 2014 was particularly strong (0.8 percent q-o-q), but this partly reflected the mild weather. The recovery has been mainly led by domestic demand, except in Q4-2013, when private consumption unexpectedly contracted.

2. **Despite a strong labor market, wage pressures are modest.** The labor force continued to expand on the back of strong immigration flows and increasing participation rates (Figure 2). Employment grew by 1 percent in 2013, as an additional 400,000 jobs were created mostly in the services sector. Meanwhile, the unemployment rate has stabilized at 5.1 percent, a post-reunification low, after having continuously declined since 2005. The newly created jobs, however, are mainly part-time, leading to a further decline in the average number of hours worked per employee. This suggests that there may be further slack in the labor market, as also reflected in the moderate wage pressures in 2013, with nominal hourly wages up 2.4 percent compared with 3.4 percent in 2012.



Sources: Eurostat, Federal Statistical Office, and IMF staff calculations.

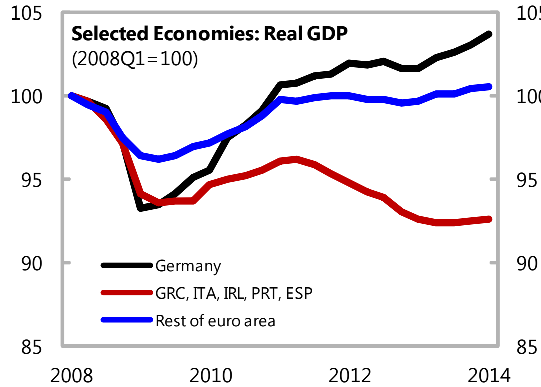


Sources: Eurostat and IMF staff calculations.

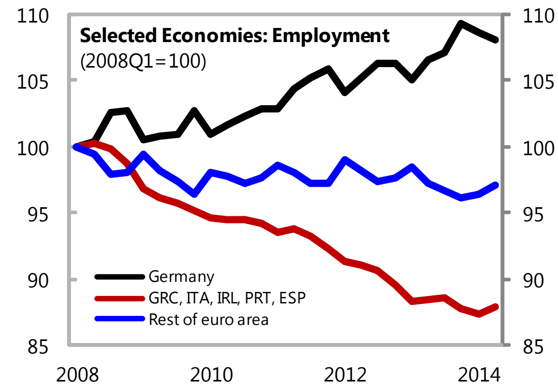
3. **Headline inflation is falling, while core inflation is stable but low.** Headline inflation has been on a downtrend throughout 2013, falling from a peak of 1.9 percent in July to 0.6 percent in May 2014. The fall reflects a marked decline in food and energy prices, but also the effects of the strong euro on other import prices. Core inflation has been low, hovering around an average of 1.1 percent. Over the last year, German inflation has exceeded that in the rest of the euro area by 0.5 percentage points. Surveys indicate that German inflation expectations appear well anchored.

Figure 1. Germany: Growth, Rebalancing, and Risks

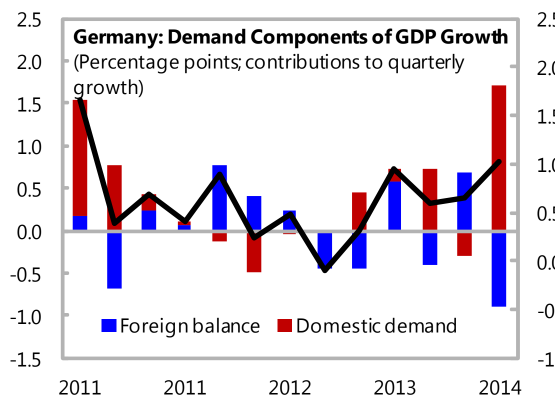
The expansion of the German economy has strengthened recently...



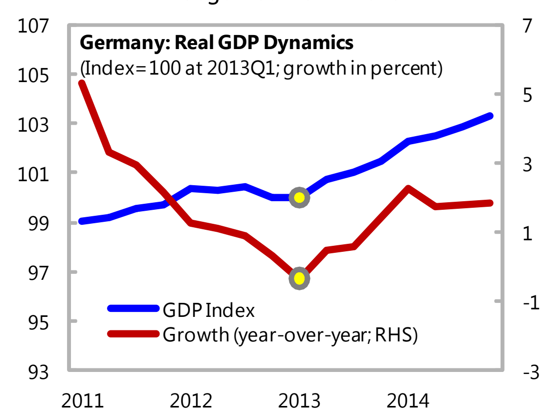
...and the continuing vigor of the labor market is remarkable.



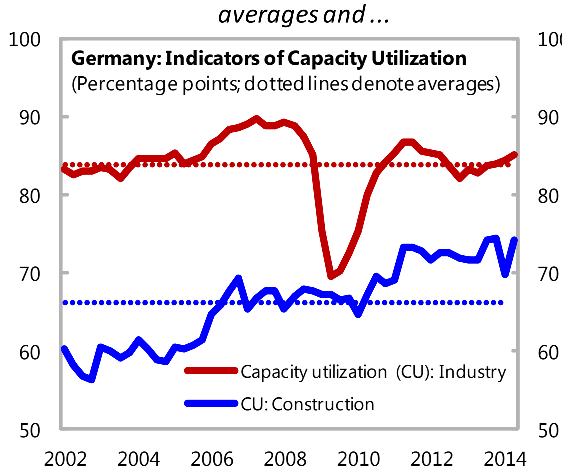
Domestic demand gained momentum in the first quarter of 2014...



...bolstering the projected uptrend, which began earlier in 2013.



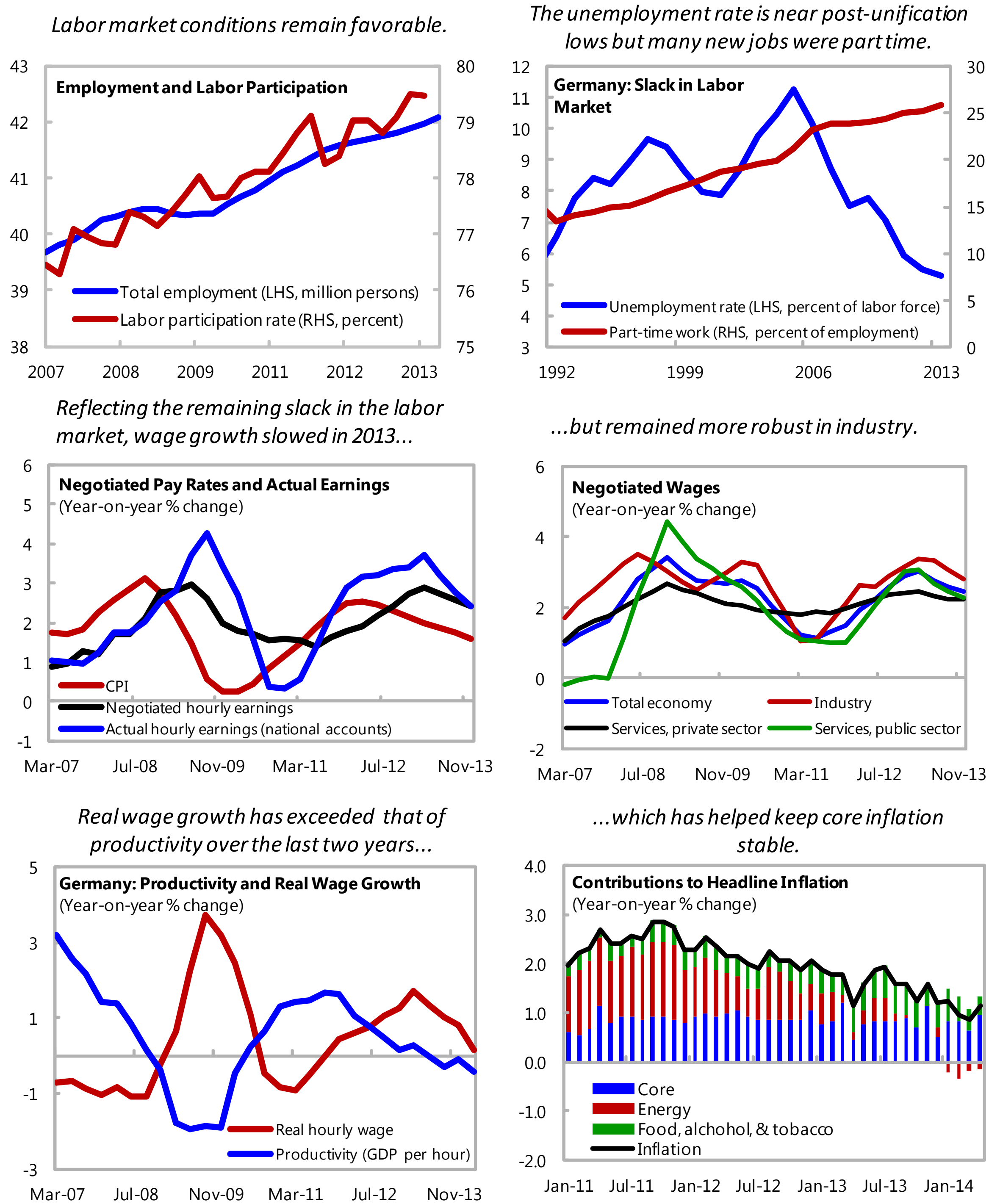
Capacity utilization rates above historical averages and ...



...other key activity indicators bode well for growth going forward.

Source: Baker, Bloom, and Davis (2012); Haver Analytics; IMF *World Economic Outlook*; United Nations; and IMF staff calculations.

Figure 2. Germany: Labor Market and Prices



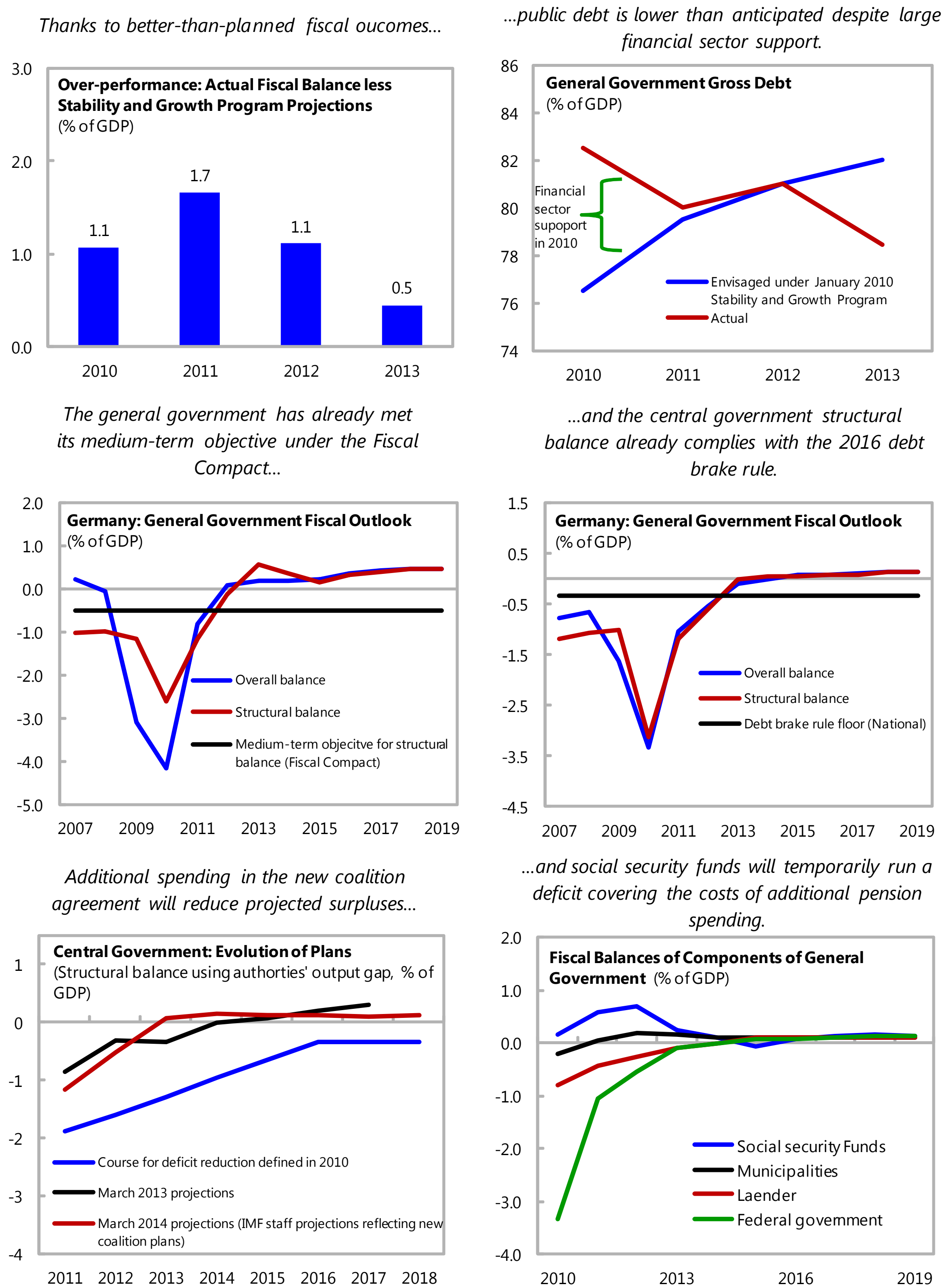
Source: Bundesbank, Eurostat, Federal Statistical Office, Haver Analytics, and IMF staff calculations.

4. **The fiscal stance was contractionary in 2013, but is envisaged to become expansionary in 2014.** The general government registered a surplus of 0.2 percent of GDP in 2013, once again stronger than planned (this time by 0.5 percent of GDP), resulting in a contractionary stance (0.7 percent of GDP)—an unwelcome development given the slack in the economy (Figure 3). The new coalition government's fiscal plans envisage a mild expansionary stance in 2014 and 2015 (see paragraph 13 below). The debt-to-GDP ratio is on a firmly declining path (see Annex III, Debt Sustainability Analysis), and structural deficit targets for the federal government (expressed in the national debt brake rule) and the general government (Medium-Term Objective of the Fiscal Compact) have been achieved. All in all, following four years of robust fiscal performance, fiscal consolidation is on track.

5. **In 2013, the current account surplus reached a new high**. The surplus for 2013 was of $274 billion (7½ percent of GDP)—virtually all in goods trade—and benefited from improved terms of trade (+1.3 percent) (Figure 4). The services balance and current transfers were both negative, while net investment income was positive and increased significantly over the last decade, reflecting the growing net investment position (see Chapter I, Selected Issues). Rising corporate savings contributed strongly to the increase in the surplus before the crisis, while low investment and fiscal consolidation were more important in recent years (Figure 5). The regional composition of the surplus has changed, with lower surpluses vis-à-vis the euro area periphery offset by larger ones vis-à-vis economies outside of Europe (most notably China). The German surplus vis-à-vis non-euro area countries accounts for two thirds of the euro area current account surplus of $303 billion.

6. **The German banking system is gradually gaining strength**. Profitability is subdued because of structurally low net interest margins and pressure from protracted low interest rates, but it was supported last year by a favorable domestic and regional macro-financial environment (Figures 6 and 7). Improvements in capital adequacy continued and, pending the results of the ECB Comprehensive Assessment, banks should be ready to meet upcoming stricter regulatory requirements in a timely manner, though a few remain highly leveraged. Large banks keep restructuring their balance sheets—helped by the current market appetite for parts of their legacy portfolios—and are strengthening their capital position, though sizable litigation costs have been an impediment in some cases. Smaller banks, with a very traditional business model, kept growing at a slow pace while benefiting from a very low level of credit risk provisioning. While credit conditions remain favorable, credit growth has been lackluster, reflecting low demand in the context of large corporate profits and retained earnings. Further progress in implementing the 2011 FSAP Update recommendations has been achieved (see Annex II).

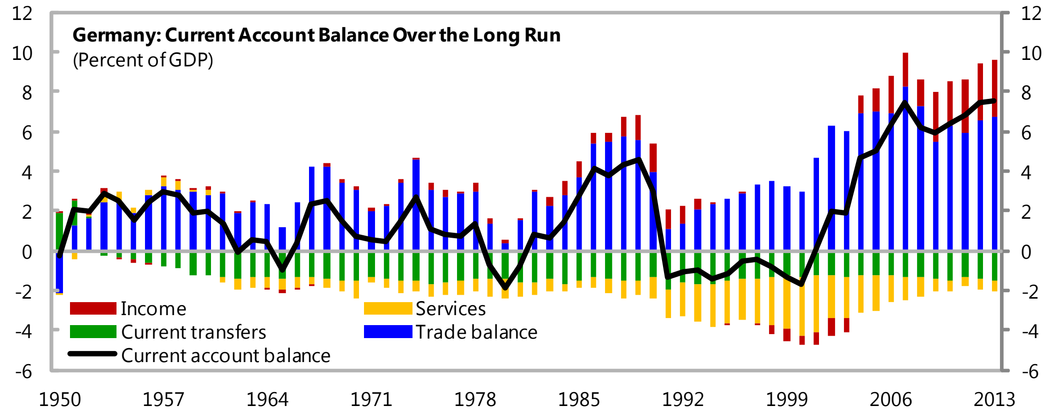
Figure 3. Fiscal Developments and Outlook



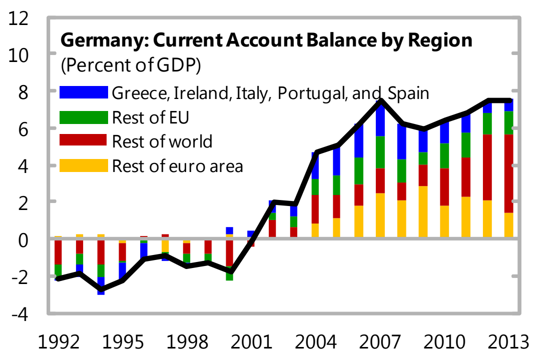
Sources: Federal Statistical Office, Stability and Growth Program Projections, and IMF staff calculations and projections.

Figure 4. Germany: The Balance of Payments

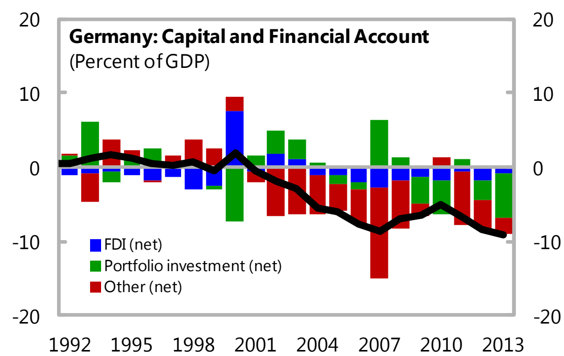
In 2013, the current accout surplus reached a new historical peak of 7½ percent of GDP...



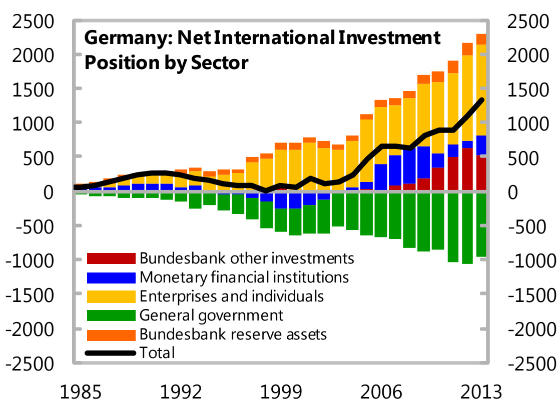
...as the surplus vis-à-vis the euro area periphery has been offset by larger surpluses vis-à-vis the rest of the world.



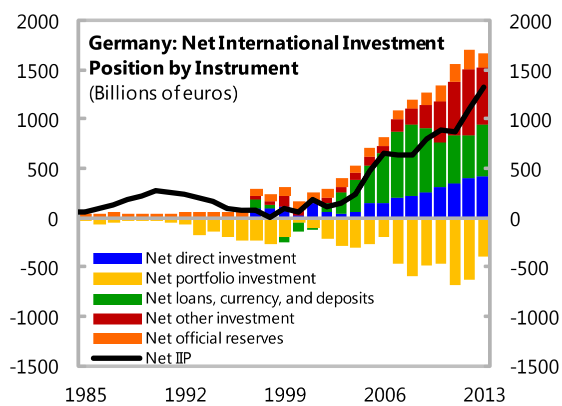
In 2013 the surplus financed large portfolio outflows.



While Target2 balances have declined...

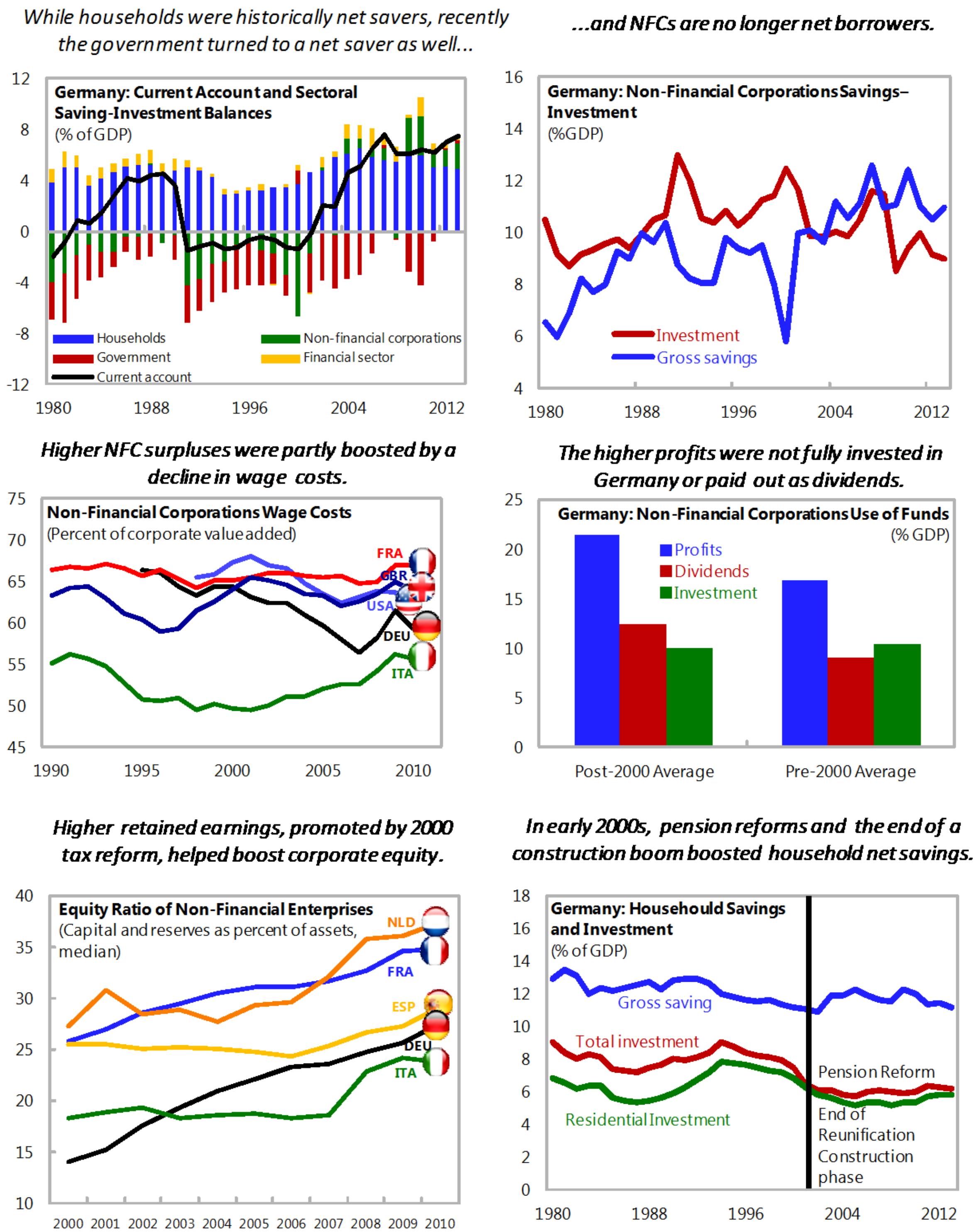


...net IIP continues to grow rapidly.



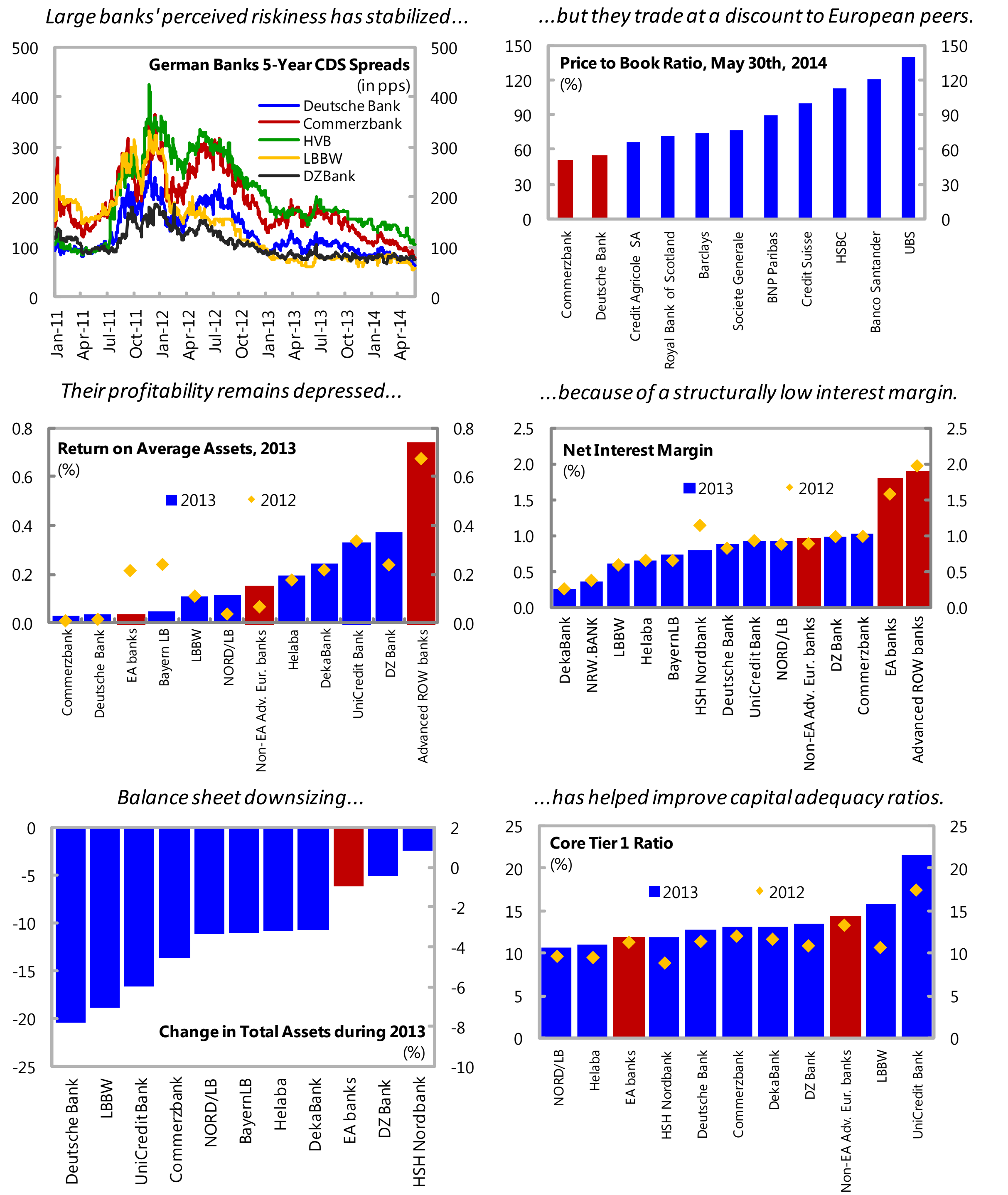
Source: Bundesbank, Haver Analytics, and IMF staff calculations.

Figure 5. A Retrospective on Current Account and Savings-Investment Balances



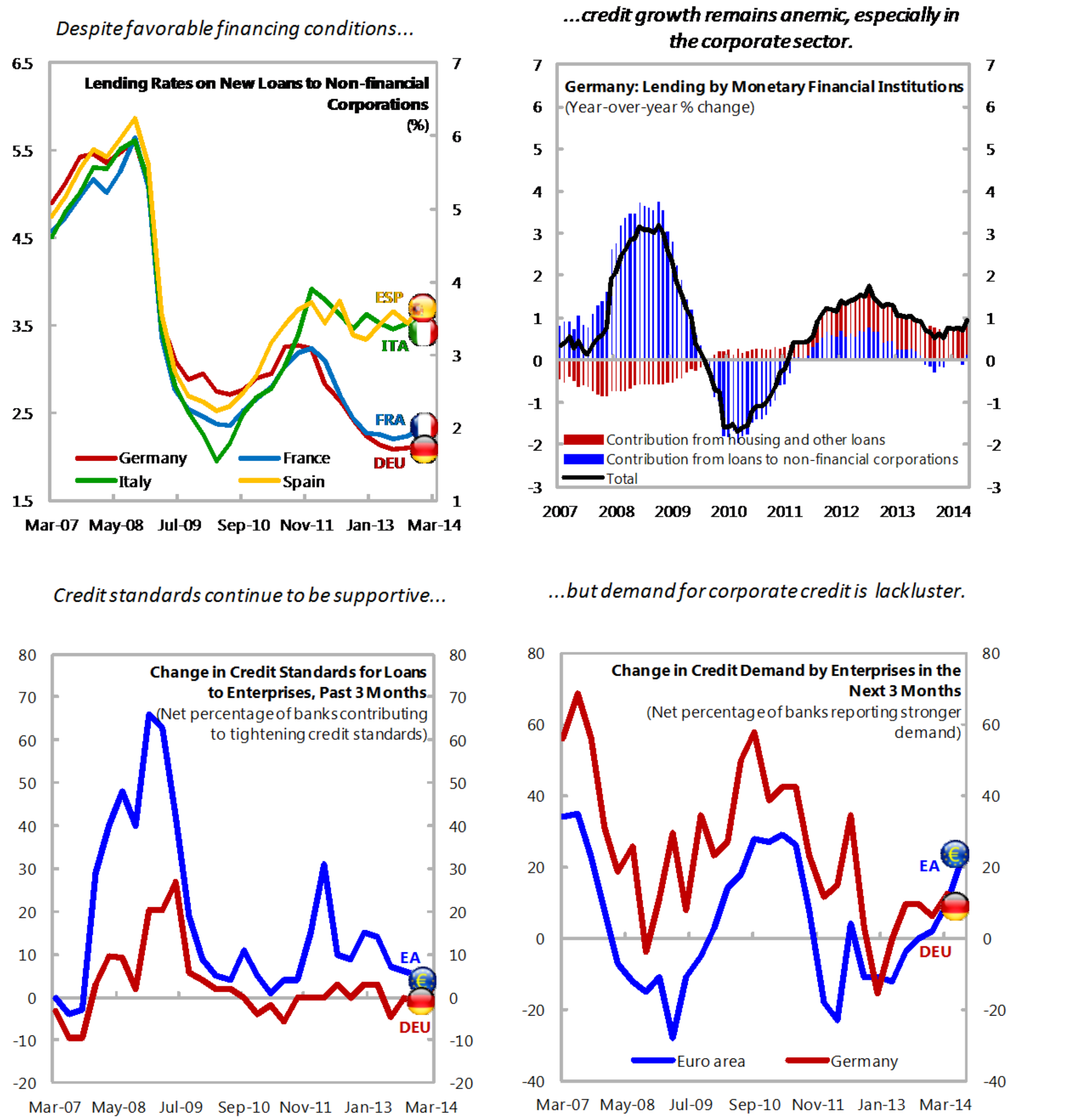
Sources: Federal Statistical Office, OECD, Eurostat, Bach Database of Harmonized Accounts of European Companies, and IMF staff calculations.

Figure 6. Recent Developments in the German Banking Sector

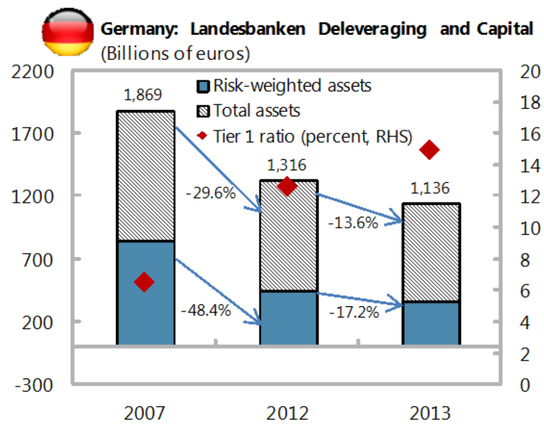


Source: Bloomberg, IFS, SNL Financial, and IMF staff calculations.

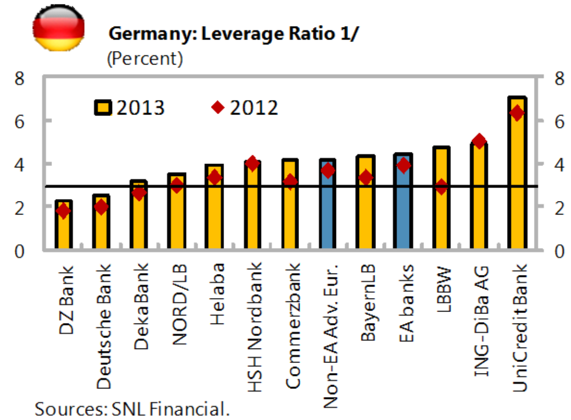
Figure 7. German Credit Conditions



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



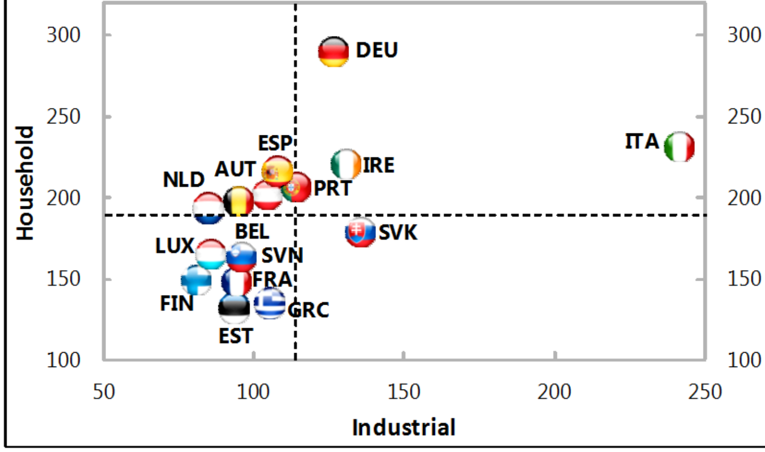
Sources: German Savings Banks Association.



Sources: SNL Financial.
1/ Tangible common equity as a percentage of tangible assets.

7. **The energy reorientation policy is facing challenges, though it has boosted the production of renewable energy (Box 1)**. Production of renewable energy (RE) has surged and accounts for 24 percent of total electricity production, in line with targets. However, the rapid expansion of RE generation has sharply raised surcharges (used to finance RE), making the electricity price one of the highest in Europe. Large, energy-intensive firms facing international competition receive subsidies in the form of reduced surcharges, but this results in a higher burden for other users and has raised concerns with the EU competition authority. At the same time, the profitability of conventional electricity producers is suffering while sizable conventional capacity needs to be preserved to complement RE generation. As nuclear energy is being phased out at an accelerated rate after the Fukushima accident, conventional generation is increasingly relying on the cheapest source, brown coal (lignite), which is causing a surge in CO_2 emissions. Finally, as the switch to RE continues and nuclear capacity is phased out, industrial users in the South of the country may have trouble accessing RE capacity in the North as grid expansion plans face strong opposition by affected parties and are behind schedule.

Electricity Prices, 2013
(Euros per megawatt hour; dotted lines denote averages)



Box 1. Energiewende

The *Energiewende* (Energy turnaround) seeks to balance energy supply security, affordability, and environmental soundness. The strategy was first set out by the government in 2010 and then modified after the 2011 Fukushima disaster to allow for the full phase-out of nuclear power by 2022. It lays out ambitious national targets for 2020, going beyond EU requirements, including: reducing carbon emissions by 40 percent relative to their 1990 level, reducing primary energy consumption by 20 percent relative to 2008, and increasing the share of renewable energy (RE) in electricity consumption by 35 percent. Targets for 2050 are equally ambitious.

The transformation of Germany's energy system is making headway. In 2013, 24 percent of electricity came from RE, making it the second largest source of electricity after brown coal (lignite). Greenhouse emissions have been lowered by 25 percent in 2012 relative to 1990 levels. Adjusted for inventory and temperature effects, primary energy consumption also decreased by one percent compared to the previous year.

The Energiewende continues to face challenges:

- ***Controlling costs.*** The rapid growth in RE has been mainly promoted through the provision of feed-in tariffs (FITs), which guarantee a sale price for RE (usually for 20 years). FITs, which were introduced already in 2000, are funded by a surcharge passed onto consumers. Despite past measures to contain costs, the RE surcharge has increased dramatically from 1.1 cents/kWh in 2008 to 6.24 cents/kWh in 2014, with German electricity prices amongst the highest in Europe. Energy-intensive internationally active firms in certain sectors are eligible for surcharge reductions (i.e., exemptions). The cost of the exemption is born by other users, i.e., households and SMEs.

- ***Facilitating grid expansion.*** The rising importance of RE supply requires substantial investment in the electrical grid to deliver electricity from suppliers to consumers, which are typically not close. This significant increase of RE generation capacity in the North has outpaced grid expansion, and the planned reduction in nuclear capacity in the more industrial South, along with a slow pace of network expansion (in part related to public opposition to such projects) have raised concerns about potential bottlenecks.

- ***Preserving conventional capacity.*** RE is by its nature intermittent, and sizable conventional capacity needs to be preserved to complement it. However, since RE has preferential access to the grid, conventional producers are finding it hard to remain profitable.

- ***Reducing CO_2 emissions.*** Despite the successful effort to promote RE, CO_2 emissions from Germany rose last year as conventional producers are increasingly relying on cheaper brown coal rather than nuclear power or natural gas.

B. Outlook and Risks: Will Domestic Demand Continue to Support Growth?

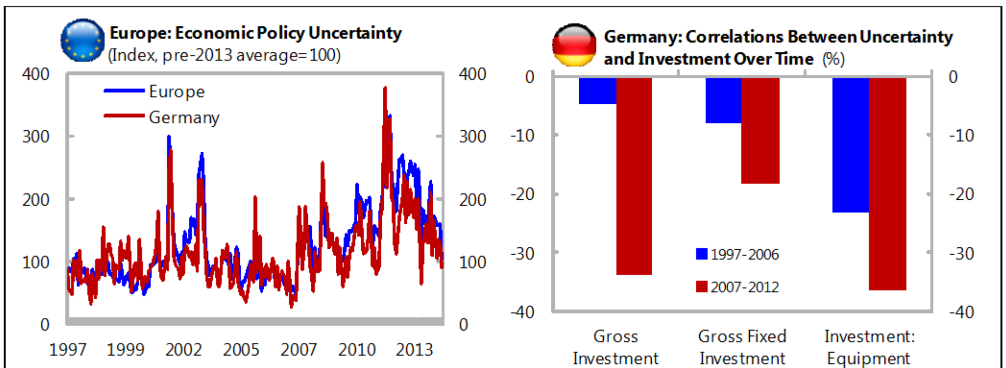
8. **A moderate pace of growth is expected to continue.** Given favorable domestic financial conditions, healthy corporate balance sheets, capacity utilization back to normal, lower uncertainty, and an anemic growth in the recent past, investment should be poised for a more enduring recovery. In particular, construction investment, buoyed by rising housing prices, is expected to keep contributing significantly to domestic demand, while private consumption growth should continue to benefit from the healthy labor market, high immigration, stronger wage growth, and healthy balance sheets, though low interest rates may lead to stepped up saving for retirement. As domestic demand growth becomes more broad-based, output should increase by 1.9 percent this year and 1.7 percent in the next, resulting in a slightly positive output gap. After a subdued pace this year, inflation is expected to pick up to 1.4 percent in 2015 as the commodity price downdraft fades and the output gap closes. Throughout the projection horizon, it is envisaged that the average rate of German inflation will exceed that in the rest of the euro area.

Germany: Output Gap Estimates

(As a percentage of potential GDP)

	2013	2014	2015
Staff	-0.3	0.1	0.1
OECD	-0.6	0.1	0.9
European Commission	-1.1	-0.7	-0.3
German Authorities	-1.1	-0.8	-0.3

9. **The extent of the recovery in investment is an important risk factor for the baseline projection.** As discussed in last year's staff report, investment is highly sensitive to policy uncertainty, notably, over euro area–wide policies. Indexes of policy uncertainty have declined noticeably in the last year, and this should underpin a rebound in investment. In addition, capacity utilization in manufacturing and (especially) in construction is now above its historic average, also boding well for investment. Nonetheless, renewed policy uncertainty could weaken business investment and hurt growth. Conversely, stronger-than-envisioned investment growth could give rise to a stronger cyclical upturn.



Source: Baker, Boom, and Davis (2012), policyuncertainty.com, and IMF staff calculations.

10. **The outlook is subject to a number of additional interrelated and potentially mutually reinforcing risks** (see Risk Assessment Matrix):

- Given its trade openness (exports-to-GDP ratio over 50 percent; value-added goods exports-to-GDP over 30 percent), Germany is highly susceptible to global recovery prospects, which have recently been marked down. A deeper-than-expected slowdown in major trading partners—including large emerging markets—would dampen growth. For example, model-based simulations suggest that each 1 percentage point temporary decline in domestic demand in Emerging Asia would drag down German growth by about 0.1 percentage point; a more protracted slowdown could have more severe implications, in part owing to weaker confidence.

- A prolonged period of slower growth in the euro area, other advanced economies, or emerging markets presents a risk that is more medium-term in nature. If the output gap widened again, automatic stabilizers should be allowed to operate fully. In case of a significant slowdown and rapidly rising unemployment, proactive fiscal policies would be needed. Persistent stagnation in the euro area, especially if combined with low inflation, represents a risk to Germany because it may, inter alia, call into question debt sustainability in the periphery, undermining confidence, and triggering a re-emergence of regional financial stress.

- An escalation of geopolitical tensions over Ukraine-Russia would hit Germany. While *direct* trade ties and financial exposures are modest, risks could nonetheless be *indirectly* transmitted to Germany through disruptions affecting its Central European supply chain partners. In addition, Germany could experience safe haven *inflows* if tensions escalate. In a tail risk scenario in which tensions lead to disruptions in energy supply, Germany would be strongly affected because of its heavy dependence on Russian oil and, especially, gas (40 percent of total consumption).

Authorities' Views

11. **The authorities agreed with staff that the moderate expansion of the German economy should continue**. They expressed confidence in a domestic demand-led upswing driven by private consumption and investment, amid tight labor market conditions and a virtually closed output gap underpinning solid wage growth. In particular, the authorities were more upbeat than staff about the strength of domestic demand, especially private investment in 2015. They noted that the structural decline in the unemployment rate had run its course and therefore expected wage growth to strengthen in 2014-15 and support consumption. At the same time, while the authorities concurred with staff that inflationary pressures would be muted this year, they underscored that prices were likely to accelerate owing to the expected positive output gap and the introduction of the minimum wage, with inflation reaching around 1.9 percent in 2016. They agreed that the current account surplus would decline gradually.

12. **The authorities saw the risks to the outlook as generally balanced.** On the upside, they noted that the strength of the expansion may be underestimated, given the building momentum of domestic demand growth. On the downside, the authorities indicated that a worsening of the

geopolitical situation in Ukraine represents a serious tail risk. They acknowledged that while difficult to assess precisely, a materialization of such a risk would adversely affect Germany primarily through confidence effects, rather than via trade and financial channels. However, the authorities noted that the resilience of the German labor market and its safe haven status could help cushion blows to the economy. They saw a re-emergence of a euro area crisis less likely in the current conjuncture, but acknowledged that risks pertaining to key emerging markets were harder to appraise. They concurred that persistently low growth in advanced economies is a risk over the medium term which could seriously undermine confidence.

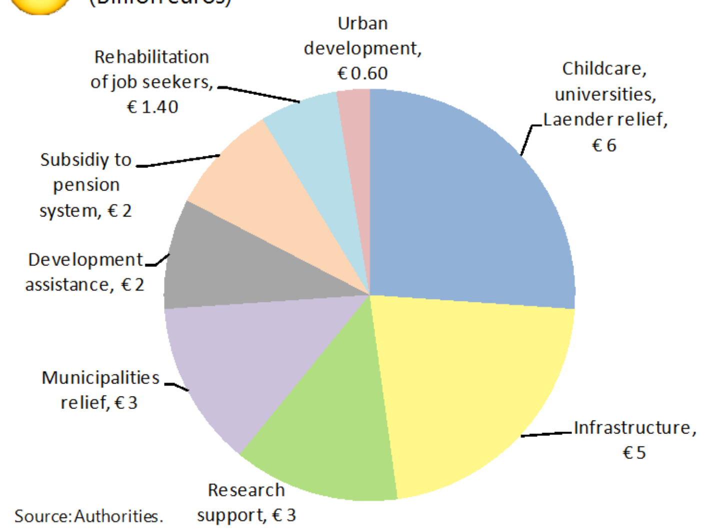
POLICY DISCUSSIONS

Policies should focus on increasing growth in Germany in ways that also support the recovery in the euro area. Higher public and private investment and services sector reform in Germany would raise medium-term output, help reduce the large and persistent current account surplus, and generate appreciable positive demand spillovers to the rest of the euro area, thus helping rebalancing within the monetary union.[1]

A. New Government, New Economic Policies

13. **The new government's economic policy package includes increases in pension benefits and other spending priorities and a new national minimum wage**. The coalition treaty envisages a balanced federal budget in 2015 and no new general taxes. However, planned declines in social security contribution rates will be foregone and long-term care contribution rates will be raised slightly. New spending will consist of new pension benefits and some additional spending by the federal government. The latter, totaling 0.2 percent of GDP per year (€23 billion over 2014–17), will go to infrastructure, education, childcare, and other priorities, and will be financed by eliminating the federal government surpluses that would have been achieved without the new measures. This additional spending will still leave the federal government with a margin of about 0.5 percent of GDP per year within the debt brake rule (which requires the federal structural deficit not to exceed 0.35 of GDP beginning in 2016), while the debt

Compostion of Additional Federal Government Spending
(Billion euros)



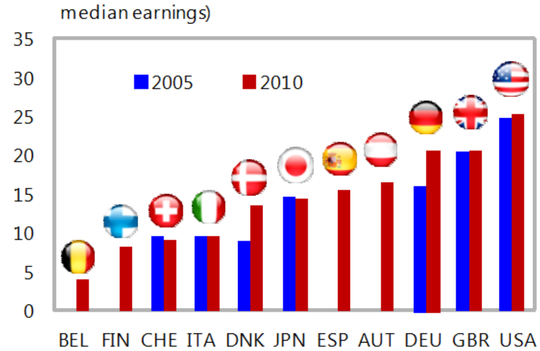
Source: Authorities.

[1] Past IMF policy recommendations and related authorities' responses are summarized in Annex I.

stock will remain on a declining path. In addition, there is a package of measures on pensions (0.3 percent of GDP per year), including higher benefits for mothers of children born before 1992 and more generous early retirement benefits for workers with long contribution periods. This package will be financed by additional subsidies from the federal government as well as by foregoing the reduction in social security contributions, which would have been required in light of the surpluses accumulated in previous years. Finally, a new national minimum-wage of €8.50 per hour will be introduced starting in 2015 and will complement the current system of negotiated sector minima.

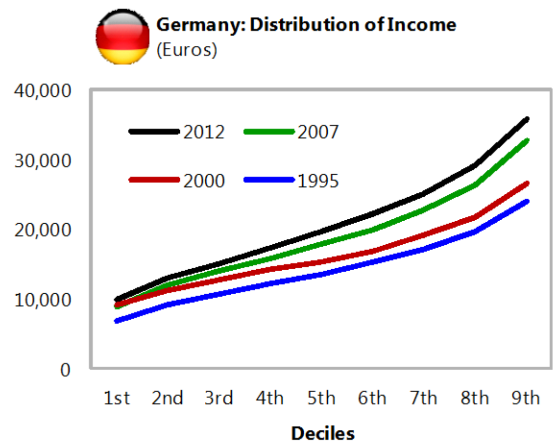
14. **While additional spending on child care facilities and education is welcome, the measures on pensions are a partial roll-back of previous reforms.** The higher pension benefits

Incidence of Low Pay
(Share of workers earning less than two-thirds of median earnings)



Source: OECD. Missing bars represent unavailable data.

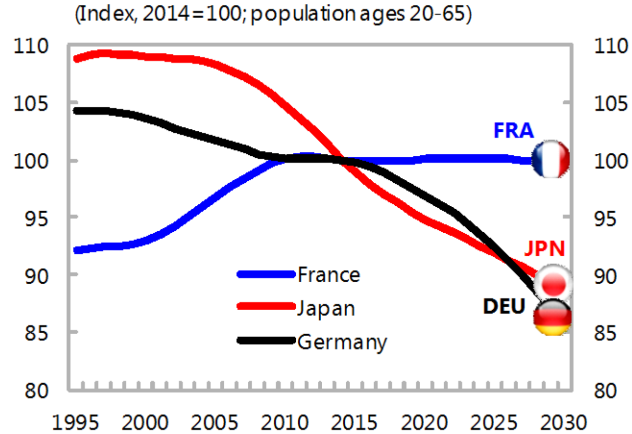
Germany: Distribution of Income
(Euros)



Source: Eurostat.

for mothers with children born before 1992 is particularly costly and does not specifically target lower-income pensioners. Measures to facilitate early retirement for workers of certain cohorts with long contribution periods will likely reduce older workers' labor market participation and may add to skills shortages in some sectors. As the social security funds need to be financially balanced, the additional spending down the road will likely require an increase in the already high social contribution rates, reduced benefits for other pensioners, or subsidies from general tax resources, some of which have already materialized. Given the high uncertainty in estimates on the take-up of the new benefit, periodic reviews of fiscal costs and adverse impact on labor participation rates are highly recommended. **The new nationwide minimum wage will**

Working-Age Population Projections
(Index, 2014=100; population ages 20-65)



Sources: United Nations and IMF staff calculations.

help reduce growing wage inequality, but it risks exacerbating unemployment in some regions. The coalition government is introducing a new national minimum wage as a reaction to growing wage and income inequality and the expanding ranks of the "working poor." A draft law now in Parliament sets the minimum wage at €8.50 per hour, effective in 2015 with certain exemptions and transitional arrangements. The proposed minimum wage is likely to be binding for some 10 percent of workers in the country, but for 15-20 percent of workers in some federal states mostly in the East where unemployment rates are already relatively high. While the employment effects of changes in minimum wage regulation are notoriously difficult to predict, sizable adverse effects in such federal states and among the low skilled could materialize (see Chapter II, Selected Issues).

15. **Decisions on the future level of the minimum wage should take the employment effects into account.** The current draft law envisages that future adjustments of minimum wage will be decided by the government following the recommendation of a commission comprising of representatives from the employers' organizations and trade unions (in equal numbers), a chair nominated jointly by both organizations, and two non-voting academic advisors. Staff expressed concern that in its planned configuration the commission may not sufficiently represent the interest of the unemployed or sectors with low trade union representation, such as many low-wage sectors that will be most affected by the minimum wage. In addition, staff pointed out that the effects of the minimum wage on income redistribution toward the working poor may be limited, as the population of minimum wage earners and that of the working poor overlap only partially. Finally, relevant household surveys might need to be strengthened to ensure that the effects of the policy can be properly assessed over time.

Authorities' Views

16. **The authorities agreed with staff that the new pension measures represented a departure from the approach of earlier pension reforms.** Past reforms aimed at reducing reliance on first pillar pensions while encouraging private retirement schemes. The authorities also pointed out that the early retirement measures would affect potentially 25 percent of workers entering retirement, but that not all those eligible would choose to retire early. They noted that the expected cost of the new measures was expected to be small relative to total pension outlays, and that there would be periodic reviews of the new policies starting in 2018.

17. **The authorities were confident that future revisions to the minimum wage would reflect the public interest.** Recognizing data limitations and difficulties of estimation, the authorities were of the view that overall macroeconomic effects of the minimum wage would likely be benign. They also pointed out that the law instructed the new commission to take into account all economic effects (including on employment) of future minimum wage increases, and that the decision ultimately rested with the government and thus would reflect broad public interests. The authorities also noted that there is no plan to review in-work benefits as an alternative redistribution tool, and there will be a review of the minimum wage policy in 2020.

B. The Current Account, Investment, and Regional Spillovers

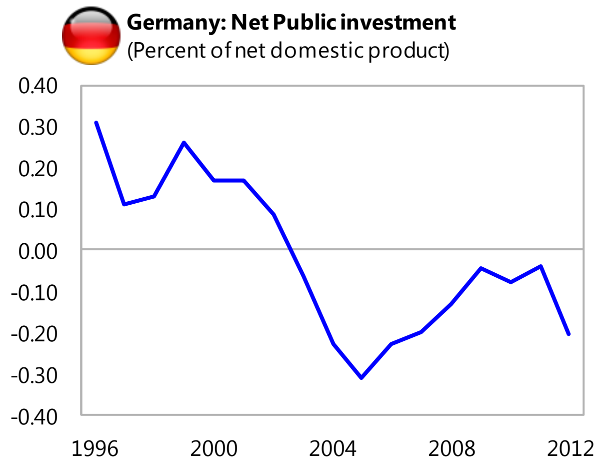
18. **The external position is substantially stronger than implied by medium-term fundamentals and desired global policy settings:**

- The current account (CA) surplus was 7½ percent of GDP in 2013, corresponding to an estimated cyclically adjusted surplus of around 8¼ percent of GDP, reflecting Germany's more advanced cyclical position relative to the rest of the world. A model-based analysis indicates a norm of 2½ percent of GDP for the cyclically adjusted CA balance. The empirical model explains Germany's CA fairly well until 2000. But it only explains less than a sixth of the subsequent rise in the CA. Also, there are not obvious policy gaps that explain the regression residual. Indeed, part of the residual also likely reflects structural determinants not fully captured by the EBA model, such as limited nominal exchange rate flexibility after the euro area was created and non-linear effects of very rapid population aging. Reflecting these factors, staff assesses the norm at 2¼–5¼ percent of GDP. Thus, *the cyclically adjusted CA is 3–6 percent of GDP stronger than that implied by fundamentals and desirable policies*.

- Turning to the real effective exchange rate (REER), model-based estimates have an unusually poor fit for Germany, pointing to a highly implausible 11 percent *over*valuation in 2013. Deviations from historical averages using alternative price/cost metrics (CPI, GDP deflator, total sales deflator, or ULC) or sample periods suggest a REER *under*valuation of 0 to 10 percent. However, based on an estimate of Germany's trade elasticity, the CA gap implies a more sizable misalignment of 9–18 percent. *All in all, staff's assessment is of a REER undervaluation of 5–15 percent*.

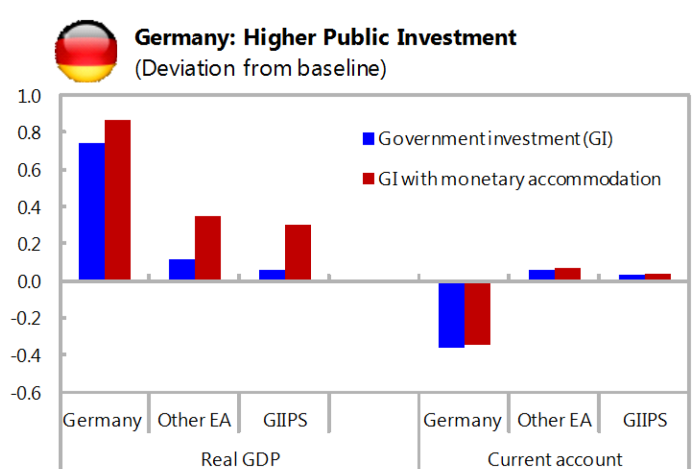
19. **The current account gap is expected to narrow gradually, but additional policies to foster more rapid rebalancing in the euro area are needed**. In the current baseline forecast, the current account surplus is expected to decline gradually to some 5¾ percent of GDP in 2019 reflecting gradual rebalancing of relative labor costs within the euro area, a recovery of investment in Germany, and a partial return of corporate savings to more normal levels. Thus, about half of the gap (some ½–3½ percentage points of GDP) is expected to persist in the medium term. With negative output gaps, no fiscal space, and liquidity traps in many of its main trading partners, as the largest European economy, Germany could play a stronger role to help regional rebalancing. This can be achieved through policies that durably increase Germany's output while also generating positive outward demand spillovers to the region and reducing the current account surplus.

20. **Stronger public investment, particularly in the aging transport infrastructure, would address identified needs, bolster domestic demand, and foster potential growth**. Although Germany is not widely seen as a country with deficient public infrastructure, the reality is that this has been a neglected area for some time. Public investment in Germany is the second lowest in the OECD, while net public investment has been negative since 2003. Shortcomings in infrastructure may be hurting the productivity of private capital and may be discouraging private investment. While the government's decision to boost spending in this area is welcome, the amount envisaged (€5 billion over four years, or about 0.2 percent of 2013 GDP) is small relative to estimated needs. Independent studies place the investment needs in transport alone at 0.2–0.4 percent of GDP per year, particularly owing to aging bridges and roadways. Schools and kindergartens, particularly at the municipal level, represent other examples of infrastructure backlogs. Therefore, to take advantage of currently low interest rates and foster private investment, public investment spending should be stepped up more significantly.



Source: Haver Analytics.

21. **Germany has the fiscal space to finance an increase in public investment of some 0.5 percent of GDP per year over four years, which would be associated with appreciable positive regional spillovers**. With the fiscal accounts projected to register a structural surplus of 0.2–0.5 percent of GDP at the general government level and of 0.1 percent at the federal government level over 2015–18, the proposed additional investment spending could be phased out so as to comply with the Medium-Term Objective of the Fiscal Compact (0.5 structural deficit for the general government) and the domestic debt brake rule (0.35 structural deficit for the federal government beginning in 2016). Such an investment program would yield a persistent increase in GDP of ¾ percent and temporarily reduce the current account surplus by 0.4 percentage points of GDP (see Chapter III, Selected Issues). The policy would also stimulate growth in the region, with peak effects on GDP in Greece,

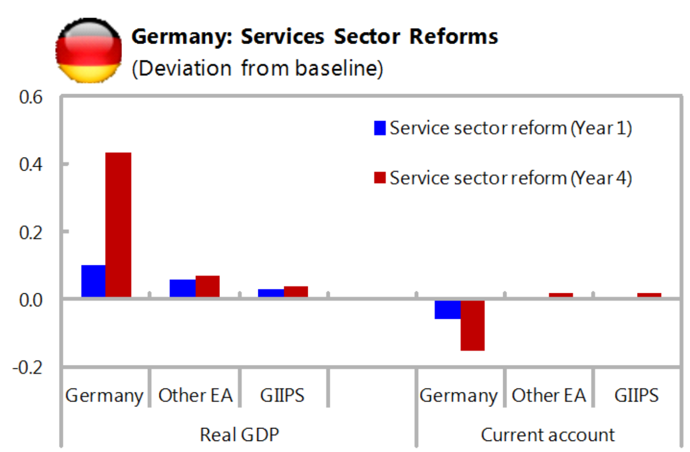


Sources: Staff calculations.
Note: Fiscal stimulus is a 2 percent of GDP debt-financed increase in public consumption or investment, with and without monetary accommodation, spread over 4 years. Real GDP and the current account (-to-GDP ratio) are measured in percent and percentage points, respectively.

Ireland, Italy, Portugal, and Spain (the GIIPS) and other euro area (OEA) countries of 0.3 and 0.4 percent respectively, in the likely case that monetary policy remained accommodative. Within this group of countries, the size of the effect varies depending on the strength of the trade linkages with Germany, implying larger spillovers to Italy for example. The increase in the debt-to-GDP ratio in Germany would be minimal given the growth offset.

22. **Such a substantial increase in public investment would be challenging but feasible.** It would be challenging because of its sheer size (½ percent of GDP is large compared with current total public investment of 1.6 percent of GDP) and because of the inevitable politics of ensuring that only the most economically sensible projects are implemented. But it would still be feasible as many of the needs have already been identified by expert studies. More importantly, a significant portion of the program would involve maintenance and refurbishing of existing infrastructure, which implies less complex project selection and execution than new projects. Involving the private sector through public-private partnerships may be appropriate in some circumstances. As public infrastructure investment is partly the responsibility of municipalities, some of which have tight budget constraints, avenues to channel resources to sub-national entities would need to be pursued.

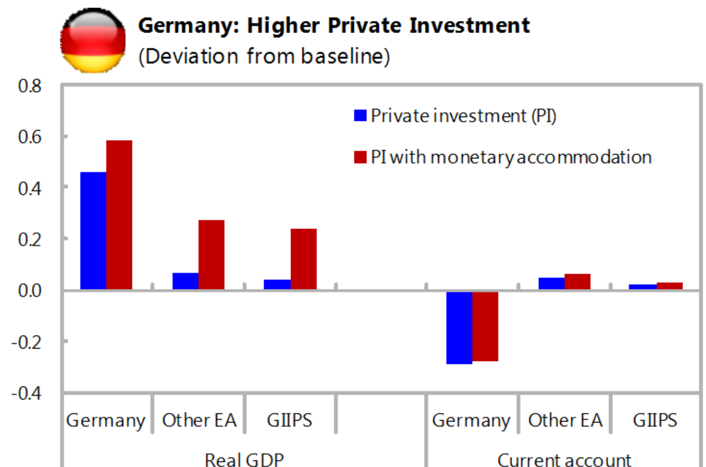
23. **Reforms in services sector regulation could boost productivity and growth and lead to a reduction in the current account surplus and modest spillovers.** Notwithstanding continuous improvement in economy-wide product market regulation over the past fifteen years, there is still scope for reducing barriers to competition in several areas of the services sector (Chapter IV, Selected Issues). Professional services remain overregulated, and greater openness could be instilled in the areas of exclusive rights, compulsory chamber membership, and regulation on prices and fees. While barriers to competition are generally low in network industries, efficiency gains in rail transportation and postal services could be achieved by reinforcing the regulator's powers to stop discrimination against the incumbent operators' competitors, as documented in recent reports by the Monopolies Commission. In the retail sector, the involvement of professional bodies in certain licensing decisions may restrict competition, as may regulation restricting large outlets. In all these sectors, more competition may reduce price mark-ups and/or increase productivity. As an illustrative example, reforms that reduced price mark-ups in *nontradable* private sector services by a cumulative 2 percentage points over 4 years would raise average growth over a four-year period by 0.1 percent, and reduce the current account surplus by 0.2 percentage point of GDP. Similar results would be



Sources: Service sector reforms are simulated by a permanent 2 percentage point reduction in the non-tradeable sector price markup over 4 years. Real GDP and the current account (-to-GDP ratio) are measured in percent and percentage points, respectively.

obtained if instead of a reduction in mark-ups, more competition boosted nontradable-sector productivity by 0.1 percent per year.

24. **A reduction in uncertainty about energy costs would also stimulate private investment, help external rebalancing, and generate positive spillovers.** Surveys indicate that uncertainty about energy costs and the overall energy policy framework is discouraging investment. In addition, while investment needed to upgrade the energy production, storage, and transmission infrastructure is estimated at 1-1½ percent of GDP per year until 2020, several factors have slowed the pace of transmission infrastructure expansion and the implementation of related projects. An earlier resolution of uncertainty associated with energy policy could boost private sector investment within and outside the energy sector, thereby stimulating economic activity domestically and abroad. An illustrative simulation indicates that additional private investment of 0.5 percent of GDP over four years could raise GDP by 0.5 percentage point, lower the current account balance by 0.3 percent of GDP, and yield positive regional spillovers.



Sources: Staff calculations.
Note: A 4-year, ½ percent of GDP increase in private investment with monetary accommodation is simulated. Real GDP and the current account (-to-GDP ratio) are measured in percent and percentage points, respectively.

Authorities' Views

25. **The authorities acknowledged that the current account surplus was high**. However, they emphasized that it did not reflect policy distortions and that rebalancing within the euro area was under way and expected to continue. In the context of the external sector assessment, they welcomed the approach of indicating ranges rather than point estimates for the gaps to signal a degree of uncertainty in the evaluation. The authorities agreed that the full implications of certain factors such as rapid population aging were difficult to capture in conventional empirical models. They also noted that the cyclically adjusted current account may be biased upward because some of Germany's trading partners may have suffered more permanent output losses than those built in the staff's analysis. The authorities concurred that the REER was undervalued, but viewed the degree of misalignment as closer to the lower half of the range presented by staff.

26. **The authorities agreed that higher public and private investment would be welcome and lower the current account surplus**. While noting that higher investment would be desirable as it would durably raise output in Germany over the medium term, they expressed some skepticism over the need for demand stimulus in the rest of the euro area, and saw structural reforms as the main priority. They also emphasized that any additional public investment should not lead to a

higher public deficit, as buffers are needed to be preserved under the fiscal rule. They pointed to public-private partnerships as possible avenues to boost infrastructure spending.

27. **The authorities were open to further reforms in parts of the services sector but did not fully share staff's diagnostic and emphasized the progress already achieved.** They saw no need for reform in postal services and had no plans to sell the government's remaining participation in the historically dominant operator. While recognizing that the market share of entrants in railways services was low, they noted that Germany was doing better than most European peers in that respect and that long-distance bus transportation services had been liberalized last year. They saw scope to strengthen the role of the federal regulator, but acknowledged that no new law to that effect was being prepared. In the area of retail, they argued that constraints on the development of large outlets reflected urban planning and environmental considerations. They agreed that certain dimensions of the regulation of professional services such as pricing could be revisited but expressed a preference for doing so in a broader European context. The authorities also saw the macroeconomic effects, particularly those on the current account, of further reforms in the services sector as likely to be smaller than suggested by staff.

28. **The authorities stated that the transformation of Germany's energy system was making headway and reforms were on the way.** They noted the progress made thus far, including the rising share of renewables in electricity consumption and lower carbon emissions relative to 1990 levels, and stressed that the strategy led to the development of a renewable energy sector and job creation. They explained that a recent reform proposal approved by the cabinet would maintain existing targets but help contain costs for users by (i) moderating growth in new RE generation capacity thereby improving cost-efficiency by avoiding over-subsidization, and (ii) gradually transitioning to more market-oriented RE financial support mechanisms. They also noted that, while some modifications are likely, the revised European Commission state aid guidelines would allow for continued surcharge reductions (exemptions) for large energy users competing internationally at least until 2020, thus helping to diminish an element of uncertainty regarding the energy sector regulatory framework. The authorities did acknowledge that there may be residual uncertainty about the exemption regime in the long run, and that it was not yet clear how the lack of profitability of conventional power producers would be addressed, or how grid expansion could be expedited amid strong opposition of affected parties, especially in some regions.

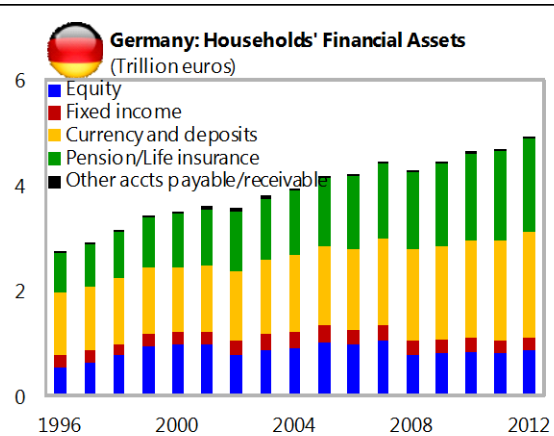
C. ECB Policy and the Low Interest Rates Environment

29. **Interest rates in the euro area are expected to remain low for a long time.** With euro area inflation projected to remain persistently subdued, the ECB is expected to keep its main policy rate at or near zero for a long period of time. In addition, the ECB is putting in place further unconventional easing measures in the form of targeted long-term refinancing operations maturing in September 2018. With monetary conditions already accommodative from a cyclical perspective, in the medium term, German inflation might rise above the ECB's price stability objective as part of the needed rebalancing process within the euro area, though this is not envisaged under the baseline July 2014 World Economic Outlook (WEO) projections.

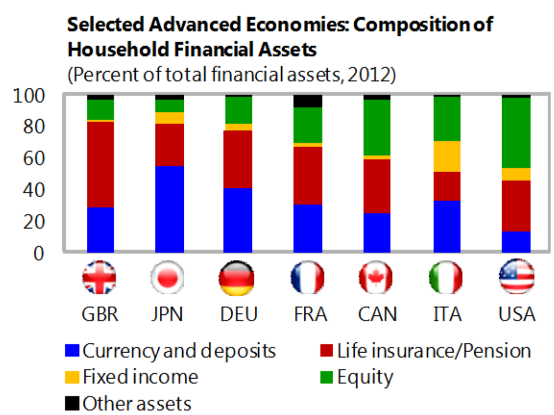
30. **Low interest rates are contributing to an upturn in the housing cycle, but related macroeconomic effects are expected to be modest.** After a prolonged period of weakness, housing prices have increased by 18 percent over the past five years (5 percent in 2013), but remain below their peak reached in the mid-1990's in real terms. Relatively stronger price dynamics is observed in some segments (i.e., apartments in selected large cities), which are overvalued by up to 25 percent according to the Bundesbank (see Chapter V, Selected Issues). Recent housing market strength appears to reflect the lack of attractive alternative domestic investment options, stronger immigration flows, demand from foreign investors, and lags in the supply response. Because of the features of German housing finance (traditionally conservative loan-to-value ratios, absence of equity release products), the effects on consumption are likely to be close to nil or even slightly negative so that the main transmission channel to the economy is through residential investment, which has been robust.

31. **While there is no need to take action at the moment, the authorities should ready their macroprudential toolkit.** Looking ahead, the monetary policy stance in the euro area may become too expansionary for Germany, given its relative position in the cycle. Hence, active use of macroprudential policies to contain related financial stability risks may become necessary down the road. Concerning current conditions in the housing market, with aggregate mortgage loan growth barely positive in real terms and lending standards unchanged, stepped-up monitoring is the right approach. Nevertheless, the currently available macroprudential policy toolkit is limited and should be enriched by adding at least loan-to-value and debt-service-to-income instruments (see Chapter VI, Selected Issues). Furthermore, the macroprudential framework could be made more operational in line with recent Financial Stability Board (FSB) peer review recommendations by clarifying the Financial Stability Committee's scope of action and developing a comprehensive communication strategy.

32. **While low interest rates are helping the fiscal accounts, they are negatively affecting the household sector, given generally conservative investment portfolios.** Households' financial assets almost doubled since 1995 with an increasing share concentrated in age-related saving products (such as life insurance and pension plans) or held as currency and deposits—all of which



Sources: Eurostat and Haver Analytics.



Sources: Haver Analytics and IMF staff calculations.

are earning low yields in the current enviroment. Households are not well positioned to gain from higher asset prices due to the low share of equities in their portfolios, low home ownership rate, and low indebtedness.

33. **A low interest rate environment is also a challenge for the banking sector.** The pressure on interest margins exacerbates banks' structurally weak profitability. A Bundesbank survey of banks' internal forecasts suggests that the sector would be able to withstand persistently low interest rates, but would make relatively weaker institutions more vulnerable. Banks' response to profit erosion, for example through possible shifts to riskier portfolios (including cross-border) should be carefully monitored to safeguard financial stability.

34. **While stable, the life insurance sector requires policy action.** In Germany as elsewhere, life insurance companies typically have very strong liquidity positions but are exposed to long-term solvency risk. The German sector is vulnerable to a persistent low interest rate environment because of historically high guaranteed interest rates coupled with a high duration gap between assets and liabilities (see Chapter VII, Selected Issues). While insurers themselves are adjusting their strategy, regulatory measures taken so far to force life insurers to build further reserves may prove insufficient, and further policy action is being considered. One avenue to protect the interest of policyholders would be to amend a policy that compels insurers to share part of their valuation reserves—including fixed-income securities—with holders of matured or cancelled policies. The insolvency of several mid-sized life insurance companies would be unlikely to have large systemic effects but it might have spillover effects on banking sector financing as bank-insurance linkages remain significant.

Authorities' Views

35. **The authorities noted that the case for further unconventional monetary policy measures in the euro area was not strong as of the time of the mission.** Counterparts saw the ECB forecast as still showing euro area inflation rising to a level consistent with the price stability objective at the end of the forecast horizon; at the same time, inflation expectations in the euro area were seen as still well anchored. In their view, very low inflation in the euro area periphery was the natural, temporary consequence of a necessary structural adjustment, and thus saw the effectiveness of additional monetary stimulus at this point as low. Furthermore, they argued that the European monetary union legal framework might not be consistent with the implementation of certain types of asset purchase programs, including in light of the recent German Supreme Court ruling on the ECB's Outright Monetary Transactions.

36. **They agreed that a persistently low interest rate environment could present financial stability challenges.** Even though they did not perceive any significant deviation of economy-wide housing prices from fundamentals, they had decided to step up their monitoring of the housing market and had conducted a detailed survey of banks' mortgage lending practices, which was still under analysis. They saw the FSB's and staff's recommendations on the macroprudential framework as in line with their current work program, and explained that the first Financial Stability Committee report to parliament this summer would contain several elements aimed at clarifying its mode of

operation. On risks in the life insurance sector, they were confident that the government's planned policy measures would help improve insurers' capital positions. They remained wary of the possible spread of search-for-yield behaviors to German financial institutions, though noted that close supervisory scrutiny through the ECB Comprehensive Assessment allayed concerns in the short term.

D. Adapting to the New Financial Regulatory and Supervisory Framework

37. **Major transitions in bank regulation, supervision, and resolution frameworks are entering a critical phase.** Beyond changes driven by membership in the European Union (capital, leverage; and liquidity requirements, recovery, and resolution—including a bail-in framework, structural measures, deposit insurance) and the euro area (Single Supervisory Mechanism – SSM, Single Resolution Mechanism), or by foreign regulators (U.S. rules on Foreign Banking Organizations), German banks are also subject since the beginning of this year to the Act on Ring-fencing and on Recovery and Resolution Planning (see Chapter VIII, Selected Issues). In line with the requirement of this Act, all domestically systemic banks have submitted a first draft of their recovery plan, which are now being fine-tuned through discussions with supervisors. With respect to the bail-in tool, the authorities conducted last year a survey of 13 large banks to assess their respective amount of available bail-inable liabilities. The issue of creditor burden sharing is of particular relevance to the insurance sector since 30 percent of German insurers' assets are banking sector liabilities (mostly vis-à-vis German banks).

38. **Robust domestic supervision remains a priority in the new European framework**. Both domestic supervisory agencies (BaFin and the Bundesbank) will continue to play a key role in the transition to the SSM, as well as in the new steady state. They will be part of joint supervisory teams for banks under direct ECB supervision, and robust collaboration within these teams will obviously be of the essence. All other banks—including all cooperative banks and most savings banks—will remain under the domestic supervisors' purview. In that regard, staff echoed several recommendations made in the recent FSB peer review, in particular those pertaining to the further enhancement of the frameworks for prompt and comprehensive risk identification as well as timely and effective intervention.

39. **Banks' capital building efforts should continue while the ECB's Comprehensive Assessment is in progress.** The Assessment is an important milestone for the German banking system. Twenty percent of the banks included in the exercise are German. About 1600 auditors are reviewing portfolios representing over 50 percent of these banks' risk-weighted assets, including legacy exposures to foreign commercial real estate, the euro area periphery, shipping, and securitizations. These exposures can be hard to value and reach multiples of Common Equity Tier 1 capital in a few banks already under restructuring. In general, however, asset quality is better than European peers' (for additional details see Chapter IX, Selected Issues). Assessed banks and supervisors are in discussions about their capital plans, and two of the largest privately owned banks have recently been or are in the process of raising fresh equity to bring their capital buffers closer to those of peers.

Authorities' Views

40. **The authorities were focused on the implementation of recently agreed financial sector reforms.** When transposing the European directive on bank recovery and resolution later this year, they intended to make the bail-in tool immediately available (i.e., not wait until January 1, 2016 as allowed under the directive). They did not expect bail-in to be a possible source of contagion to the German insurance sector as insurers' exposures to banks are well diversified and 70 percent of these exposures are collateralized. While recognizing that further progress toward addressing the too-big-to-fail problem would be desirable, they planned to advance at the same pace as regional and global initiatives. They supported the European approach according to which the leverage ratio would be introduced as a complement to risk-based capital ratios in line with international agreements. They thought that reporting obligations for institutions would allow appropriate review and calibration with a view to migrating to a binding measure in 2018, and that the final decision should take into account the impact of the leverage ratio on different types of business models.

41. **Eventually, they believed the banking union would need to be put on a stronger legal footing.** Their view was that current EU treaties were not drafted with the objective of a banking union in mind and therefore did not provide a sufficient legal basis for a genuine European supervisory or resolution authority. In particular, they argued that there was insufficient separation between monetary policy and banking supervision under the current framework.

42. **While work on the ECB's Comprehensive Assessment was still ongoing, the authorities were confident German banks were generally well positioned for the exercise.** They noted the continuous and significant improvement in banks' capital ratios over the past several years, but agreed that shipping loans could be a source of further impairments. Should a capital shortfall be identified in a bank and should the public sector be the only available source of fresh capital, they would support recapitalization only for banks with a viable business model and only after burden-sharing with junior bondholders as required by the EU state aid law. They conceived of ESM involvement in the form of a loan to a member state for recapitalization purposes.

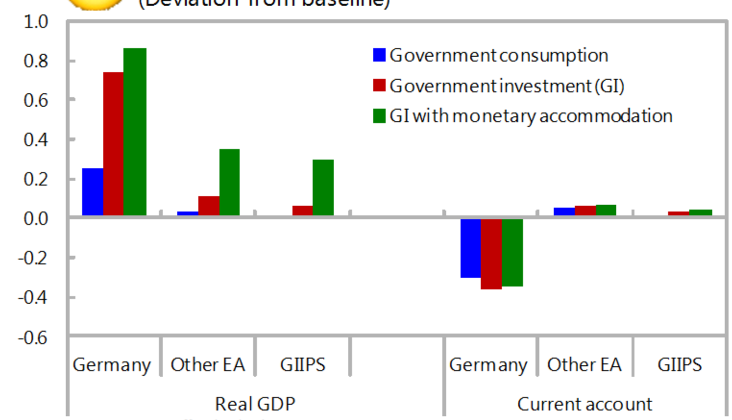
E. Some Questions and Answers on Staff Analysis

The question and answer format of this section is intended to probe further into the reasoning behind staff recommendations.

43. **Question: Past staff analysis has shown that fiscal stimulus in Germany would have a relatively small impact on the rest of the euro area—has staff changed its view?**

Answer: Previous analyses focused on higher German public consumption and found limited spillovers to the stressed economies in the euro area (Greece, Ireland, Italy, Portugal, and Spain). Specifically, the effect would be less than 0.1 percent higher GDP in response to a 1 percent stimulus. In contrast, this report analyzes the beneficial growth spillovers from higher public investment and finds that such spillovers can be sizeable because more public capital increases the productivity of private capital, inducing higher private investment. These growth spillovers are further amplified in the likely case that monetary policy in the region remains accommodative. In particular, in the case of a 4-year, ½ percent of GDP increase in German public investment the peak effect is higher GDP of 0.3 for the stressed economies. In contrast, the corresponding spillovers associated with a similar increase in German public consumption are small. Within the stressed economies in the euro area, some (e.g., Italy) would benefit from these spillovers to a greater extent given their closer trade ties with Germany.

Germany: Higher Public Spending
(Deviation from baseline)



Sources: Staff calculations.
Note: Fiscal stimulus is a 2 percent of GDP debt-financed increase in public consumption or investment, with and without monetary accommodation, spread over 4 years. Real GDP and the current account (-to-GDP ratio) are measured in percent and percentage points, respectively.

44. **Question: If higher public investment in Germany is so beneficial, why not recommend a larger increase?**

Answer: Higher public investment is one of the policies—along with those promoting higher private investment and service sector reforms—to support growth as well as rebalancing efforts in the rest of the region. Staff is arguing for higher public investment of ½ percent of GDP increase per year for 4 years—corresponding to over €50 billion in additional extra spending in addition to the €5 billion set aside for transportation infrastructure in the government's economic program over 2014–17. It is important that publicly financed projects have true economic value and address identified bottlenecks and deficiencies, otherwise the positive effect on private investment will not materialize. An even larger increase in public investment than what is recommended by staff would likely not be feasible from an administrative point of view and may not meet true economic needs. Finally, a larger increase may violate Germany's fiscal rules and undermine their credibility. Confidence in Germany's fiscal soundness is a key anchor for the euro area.

45. **Question: Given increases in wage and income inequality in Germany, why is staff not more supportive of the new national minimum wage? Won't it also help rebalancing?**

Answer: Staff expresses two main concerns about the new minimum wage. First, its level is high relatively to current wages in parts of Germany and for some groups, suggesting that it may lead to a sizable increase in unemployment concentrated in those regions and groups. Specifically, according to statistics from the socio-economic panel survey as of 2011, low wage earners are disproportionately concentrated in the East, among part-time workers, mini-job holders, and women. Second, many recipients of the minimum wage are not necessarily the working poor: while an estimated 4-6 million workers earn less than the proposed minimum wage, only some 1.3 million workers qualify for social assistance in the form of in-work benefits. In addition, for the latter, without a change in the existing in-work benefits system, the effects of the minimum wage on the real disposable income are likely to be limited as some will lose employment while others will see their in-work benefits decline as their wages rise. Expert studies suggest modest effects on the wage bill and aggregate demand, implying small external spillovers (see Chapter I, Selected Issues). Finally, as wages in the export sector are well above the proposed minimum, the new law is not expected to affect external competitiveness.

Characteristics of Low Wage Earners

(Percent, 2011)

	Share in respective group earning hourly wage lower than 8.5 euros
Region	
West	15
East (including Berlin)	27
Employment status	
Full-time employees	10
Part-time employees	18
Marginally employed/mini jobs	54
Gender	
Male	12
Female	21
Total employed	17

Source: DIW Berlin.

46. **Question: German banks have improved their capital adequacy ratios significantly over the past several years. Why is staff calling for even stronger capital positions?**

Answer: It is true that the German banking system's capital ratios have increased significantly above the regulatory minima under the Basel II capital rules that were applicable until the end of last year (see Table 5). However, under the new, stricter Basel III capital requirements that are in place since the beginning of this year and are being phased in until January 1st 2019, the capital buffers (on a fully phased-in basis) are significantly thinner. Some large banks also fall short of the three percent minimum leverage ratio that will become applicable in 2018. Large banks' profitability has been mediocre in recent years and will remain under pressure because of the low interest rate environment as well as the need to dispose of or further provision for legacy assets. Thus their internal capital generation capacity is likely to remain depressed for some time. The ECB's ongoing asset quality review might uncover the need for adjustments in the treatment of hard-to-value exposures while the adverse scenario of the stress tests that will follow soon after might also prove challenging for some banks. Against this background staff believes that the current benign market environment should be exploited to the fullest to build thicker capital buffers.

STAFF APPRAISAL

47. **The recovery is expected to gain further momentum, but medium-term growth prospects are subdued.** Private consumption should benefit from solid wage and employment growth while business investment should continue to strengthen. However, a still weak and precarious international environment, lingering uncertainty, fast approaching adverse demographic developments, and uncertain future energy costs will constrain medium-term growth.

48. **Policies should focus on increasing growth in Germany while at the same time supporting the recovery in the euro area**. Higher public and private investment and services sector reform in Germany would raise medium-term output, reduce the current account surplus—which continues to exceed the level consistent with medium-term fundamentals and desired global policy settings—and generate appreciable positive demand spillovers to the rest of the euro area, thus helping rebalancing within the monetary union.

49. **Stronger public investment, particularly in the transport infrastructure, is needed and feasible**. The government's decision to boost spending in this area is welcome, but the amount is small relative to estimated needs. Additional investment up to 0.5 percent of GDP per year over four years could be financed without violating fiscal rules and would have only a minor impact on the debt-to-GDP ratio given the growth offset. Such a program would yield a persistent increase in GDP by crowding in private investment and would also stimulate growth in the rest of the euro area. Measures to ensure that the financed projects have true economic value need to be put in place. It would also be important to explore the role that the private sector could play in these initiatives through public-private partnerships.

50. **Unlike spending on investment, pension expenditures do not increase potential output, and have negligible outward spillover effects**. Planned increases in benefits to certain categories of pensioners are particularly costly. Measures to facilitate early retirement for workers with long contribution periods will likely reduce older workers' labor market participation and add to skills shortages in some sectors, while further increasing already high social security contributions down the road.

51. **Greater clarity about the future energy sector regulatory framework would encourage private investment**. The announced reform of the renewable energy law has usefully clarified important elements of the strategy, including—for the short term—the contentious regime of exemptions for energy-intensive, internationally active firms. However, the private sector still

perceives the exemption regime in the medium term as uncertain. At the same time, hostility by some affected parties continues to delay the needed grid extension. Additional policies to address these problems would help mobilize the investment potential in the energy sector and in the rest of the economy and thus help strengthen the outlook.

52. **Further reforms in services sector regulation could boost competition and productivity**. There is scope for deepening competition in several areas of the services sector. In professional services (accountants, architects, engineers, lawyers, tax consultants, etc.), greater flexibility could be introduced in the areas of exclusive rights, compulsory chamber membership, and regulation on prices and fees. While barriers to competition are generally low in network industries, in rail transportation and postal services we would welcome the reinforcement of the regulator's powers to stop discrimination against the incumbent operators' competitors.

53. **The new nationwide minimum wage will help reduce growing wage inequality, but it risks exacerbating unemployment in some regions**. Expert estimates suggest that the proposed minimum wage will be binding for about 20 percent of workers in some federal states where unemployment is already relatively high. While the employment effects of changes in minimum wage regulation are notoriously difficult to predict, sizable adverse effects in these areas could materialize. Decisions by the to-be-created commission on the future level of the minimum wage should take these employment effects into account and give adequate consideration to the interests of those not well represented by employers' and employees' associations. In addition, alternative ways to achieve income redistribution could usefully be explored.

54. **Banks should keep strengthening their capital position ahead of the completion of the ECB's Comprehensive Assessment.** The banking sector keeps downsizing through the disposal of legacy assets, thus building up capital buffers, and supervisors are in active dialogue with assessed banks about their capital plans. While asset quality is generally better than European peers', the Assessment will help bring clarity about the health of banks still holding sizable portfolios of hard-to-value legacy assets. In addition, supervisors should continue pressing to ensure that all large banks comfortably meet forthcoming minimum standards on leverage ratios. Close cooperation and coordination within SSM joint supervisory teams will be important in this context.

55. **While concerns about a housing bubble are premature, preparations against it are not.** Low interest rates are contributing to an upturn in the housing cycle and have rekindled residential investment without threatening financial stability to date. Nevertheless, the macroprudential toolkit should be readied. We welcome the authorities' progress in making the new Financial Stability Committee fully operational and in expanding their statistical coverage of the mortgage market. We encourage them to consider expanding the set of macroprudential tools to include loan-to-value and debt-service-to-income instruments.

56. **While stable, the life insurance sector requires policy action.** High average guaranteed interest rates and a high duration gap between assets and liabilities make it vulnerable in the medium term to a persistent low interest rate environment. Measures taken so far to force life insurers to build up reserves might prove insufficient, and further policy action is rightly being

considered. One avenue to protect the interest of the majority of policyholders would be to amend a regulation that compels insurers to share part of their hidden valuation reserves—including on fixed-income assets—with holders of matured or cancelled policies.

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

Germany: Risk Assessment Matrix

Source of Risks	Relative Likelihood	Impact	Policy Response
Risks to the economic outlook			
I. Weaker investment recovery. German investment growth has been shown to be sensitive to policy uncertainty. A resurgence of policy uncertainty could weaken business investment and adversely affect growth.	M	M	**If the output gap widens, automatic stabilizers should as usual be allowed to operate freely. However, if prospects sour markedly and the labor market is expected to weaken significantly, then proactive fiscal policies would be needed.**
II. Protracted period of slower growth in advanced and emerging economies (including because of lower-than-anticipated growth and persistently low inflation in advanced economies, the maturing of the cycle in emerging markets, and/or a growth slowdown in China). Given its high degree of trade openness, Germany is highly susceptible to fluctuations in global demand.	H	M	
III. Geopolitical tensions surrounding Russia-Ukraine (which could lead to disruptions in global financial, trade, and commodity 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	**Accelerating the implementation of Germany's energy strategy may become necessary.**
Risks to the financial sector			
IV. Global and regional financial instability: • Surges in global financial market volatility, triggered by geopolitical tensions or revised expectations on UMP exit/emerging market fundamentals.	H	M	**Keep reducing vulnerabilities in the financial sector by increasing capital buffers.**
• In the euro area, re-emergence of sovereign stress due to incomplete reforms, unanticipated outcomes from the asset quality review and stress tests in the absence of a fiscal backstop.	L		
Medium-term risk			
V. Distortions from a protracted period of low interest rates continue to build. The recent strength in pockets of the German housing market could spread nationwide and real estate assets could become overvalued and associated with excess leverage. Banks' net interest margin could shrink further and banks may be tempted to adopt (risky) search-for-yield strategies. Some life insurers may become distressed.	L	M	**Take precautionary measures now by strengthening the macroprudential framework and prudential supervision, as well as requiring higher reserves in life insurers.**

Note: The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path (the scenario most likely to materialize in the view of IMF staff). The relatively likelihoods of risks listed is the staff' subjective assessment of the risks surrounding the baseline ("low" is meant to indicate a probability below 10 percent, "medium" a probability between 10 and 30 percent, and "high" a probability of 30 percent of more). The RAM reflects staff views on the sources of risks and overall level of concern as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly.

Table 1. Germany: Selected Economic Indicators, 2008-15

Total population (2013, million)	80.8					
GDP per capita (2013, USD)	44,999					

	2010	2011	2012	2013	2014 1/	2015 1/
			(Percentage change)			
GDP	3.9	3.4	0.9	0.5	1.9	1.7
Output gap (In percent of potential GDP)	-1.2	0.9	0.4	-0.6	-0.3	0.1
Private consumption	1.0	2.3	0.7	1.0	1.1	1.3
Public consumption	1.3	1.0	1.0	0.4	1.0	1.3
Gross fixed investment	5.4	7.0	-1.4	-0.7	5.2	4.3
Construction	2.6	8.1	-0.5	0.0	5.8	4.6
Machinery and equipment	9.5	6.0	-3.3	-2.2	5.1	4.6
Final domestic demand	1.8	2.9	0.4	0.6	1.8	1.8
Inventory accumulation 2/	0.5	0.0	-0.5	0.2	0.0	-0.2
Total domestic demand	2.3	2.8	-0.2	0.8	1.8	1.7
Exports of goods and nonfactor services	14.8	8.1	3.8	1.1	4.9	4.9
Imports of goods and nonfactor services	12.3	7.5	1.8	1.6	5.2	5.4
Foreign balance 2/	1.7	0.7	1.1	-0.2	0.2	0.1
			(In millions of persons, unless otherwise indicated)			
Employment and unemployment						
Labor force	41.7	42.2	42.4	42.7	43.0	43.3
Employment	38.7	39.7	40.1	40.5	40.7	40.9
Unemployment 3/	2.9	2.5	2.3	2.3	2.3	2.4
Unemployment rate (in percent) 4/	7.1	6.0	5.5	5.3	5.3	5.4
			(Percentage change)			
Prices and incomes						
GDP deflator	1.0	1.2	1.5	2.2	1.7	1.7
Consumer price index (harmonized)	1.2	2.5	2.1	1.6	1.1	1.4
Compensation per employee (industry)	0.5	2.6	3.1	2.2	2.7	2.8
Compensation per employee (total economy)	2.1	2.1	3.1	2.1	2.5	2.6
Unit labor cost (total economy)	-1.0	1.0	3.1	2.4	1.3	1.2
Unit labor cost (industry)	-11.1	-0.6	2.6	2.6	2.2	1.2
Real disposable income 5/	1.0	1.8	0.7	0.5	1.1	1.4
Personal saving ratio (in percent)	10.9	10.4	10.3	10.0	9.9	9.9

Table 1. Germany: Selected Economic Indicators (concluded)

	2008	2009	2010	2011	2012	2013 1/	2014 1/	2015 1/
	(In billions of euros, unless otherwise indicated)							
Public finances								
General government								
Expenditure	1,090	1,146	1,194	1,179	1,191	1,219	1,255	1,292
(In percent of GDP)	44.1	48.3	47.9	45.2	44.7	44.5	44.3	44.0
Revenue	1,089	1,073	1,090	1,157	1,194	1,224	1,260	1,298
(In percent of GDP)	44.0	45.2	43.7	44.3	44.8	44.7	44.4	44.2
Overall balance 6/	-2	-74	-104	-21	2	5	5	6
(In percent of GDP)	-0.1	-3.1	-4.2	-0.8	0.1	0.2	0.2	0.2
Structural balance	-25	-28	-65	-31	-3	15	10	5
(In percent of GDP)	-1.0	-1.2	-2.6	-1.2	-0.1	0.6	0.4	0.2
Federal government								
Overall balance 6/	-17	-39	-83	-27	-14	-3	0	2
(In percent of GDP)	-0.7	-1.6	-3.3	-1.0	-0.5	-0.1	0.0	0.1
General government debt	1,653	1,771	2,059	2,088	2,161	2,147	2,130	2,110
(In percent of GDP)	66.8	74.6	82.5	80.0	81.0	78.4	75.1	71.8
	(In billions of USD, unless otherwise indicated)							
Balance of payments								
Current account	226.1	196.0	211.4	248.3	255.3	273.5	273.3	274.6
(In percent of GDP)	6.2	5.9	6.4	6.8	7.4	7.5	7.0	6.7
Trade balance 7/	164.7	121.8	142.5	138.4	156.7	168.7	156.4	152.7
Services balance	-10.3	-7.2	0.3	3.4	3.3	2.4	3.5	2.1
Factor income balance	32.4	59.4	54.8	70.5	76.4	76.9	82.3	86.4
Net private transfers	-16.8	-18.8	-23.4	-20.2	-23.9	-28.0	-28.0	-28.0
Net official transfers	-16.3	-14.4	-14.9	-13.7	-13.9	-14.0	-15.5	-17.1
Foreign exchange reserves (EUR billion, e.o.p.) 8/	27.7	25.6	28.0	29.4	28.8	28.1	…	…
	(Percentage change)							
Monetary data								
Money and quasi-money (M3) 9/ 10/	9.6	-0.3	-0.3	5.8	6.9	2.7		
Credit to private sector 9/	2.6	-1.6	-0.3	1.2	1.3	0.8		
	(Period average in percent)							
Interest rates								
Three-month interbank rate 11/	4.6	1.2	0.8	1.4	0.6	0.2		
Yield on ten-year government bonds 11/	2.9	2.8	2.8	2.7	1.6	1.6		
Exchange rates								
Euro per US$ 11/	0.73	0.68	0.76	0.76	0.76	0.73		
Nominal effective rate (1990=100) 12/	103.4	104.8	98.9	98.9	98.1	101.5		
Real effective rate (1990=100) 12/	104.9	105.6	98.4	97.4	96.4	99.8		

Sources: Deutsche Bundesbank; Federal Statistical Office; IMF staff estimates and projections.
1/ IMF staff estimates and projections.
2/ Growth contribution.
3/ National accounts definition.
4/ ILO definition.
5/ Deflated by the national accounts deflator for private consumption.
6/ Net lending/borrowing.
7/ Excluding supplementary trade items.
8/ Data for 2013 refer to December.
9/ Data for 2013 refer to December.
10/ Data reflect Germany's contribution to M3 of the euro area.
11 Data for 2013 refer to December.
12/ Data for 2013 refer to December.

Table 2. Germany: General Government Operations

	2011	2012	2013	2014 Proj.	2015 Proj.	2016 Proj.	2017 Proj.	2018 Proj.	2019 Proj.
	(In percent of GDP)								
Revenue	44.3	44.8	44.7	44.4	44.2	44.1	44.1	44.0	44.0
Taxes	22.9	23.2	23.2	23.3	23.4	23.4	23.4	23.4	23.4
Indirect taxes	11.7	11.3	11.2	11.2	11.3	11.3	11.3	11.3	11.3
Direct taxes	11.1	11.9	12.0	12.1	12.1	12.1	12.1	12.1	12.1
Social contributions	16.7	16.8	16.8	16.7	16.7	16.7	16.8	16.8	16.8
Grants	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
Other current revenue	4.5	4.6	4.5	4.3	4.0	3.9	3.7	3.6	3.6
Expense	45.2	44.9	44.6	44.3	44.0	43.8	43.7	43.6	43.6
Compensation of employees	7.6	7.6	7.6	7.6	7.4	7.4	7.3	7.2	7.2
Goods and services	4.8	4.9	4.9	4.9	4.8	4.7	4.7	4.6	4.6
Interest	2.5	2.4	2.1	1.9	1.7	1.7	1.8	1.8	1.8
Subsidies	1.0	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0
Social benefits	24.3	24.1	24.3	24.3	24.3	24.3	24.4	24.4	24.4
Social benefits in kind	7.9	8.0	8.2	8.4	8.5	8.5	8.7	8.8	8.8
Social transfers	16.3	16.1	16.1	15.9	15.9	15.8	15.7	15.6	15.6
Pensions	9.4	9.3	9.2	9.1	9.0	9.0	9.0	8.9	8.9
Child benefits	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Unemployment benefits	1.6	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Other social transfers	4.6	4.6	4.7	4.6	4.6	4.6	4.6	4.6	4.6
Other expense	4.9	4.9	4.8	4.8	4.7	4.6	4.6	4.5	4.5
Net acquisition of nonfinancial assets	-0.1	-0.2	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
Net lending/borrowing	-0.8	0.1	0.2	0.2	0.2	0.4	0.4	0.5	0.5
Primary balance	1.7	2.5	2.3	2.1	1.9	2.1	2.2	2.3	2.3
Memorandum item:									
Structural balance	-1.2	-0.1	0.6	0.4	0.2	0.3	0.4	0.5	0.5
Change in structural balance	1.4	1.1	0.7	-0.2	-0.2	0.2	0.1	0.1	0.0
Public gross debt (Maastricht definition)	80.0	81.0	78.4	75.1	71.8	68.8	65.8	62.9	60.1

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

Table 3. Germany: Medium-Term Projections, 2010-19

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
					Projections					
	(percentage change unless indicated)									
Real sector										
Real GDP	3.9	3.4	0.9	0.5	1.9	1.7	1.5	1.4	1.4	1.3
Total domestic demand	2.3	2.8	-0.2	0.8	1.8	1.7	1.4	1.4	1.3	1.3
Foreign balance (contribution to growth)	1.7	0.7	1.1	-0.2	0.2	0.1	0.2	0.2	0.2	0.2
Output gap (percent of potential GDP)	-1.2	0.9	0.4	-0.6	-0.3	0.1	0.1	0.0	0.0	0.0
Consumer prices	1.2	2.5	2.1	1.6	1.1	1.4	1.6	1.7	1.7	1.7
	(percent of GDP)									
External sector										
Current account balance	6.4	6.8	7.4	7.5	7.0	6.7	6.4	6.0	5.9	5.7
Goods and services balance	5.7	5.4	6.0	6.2	5.6	5.3	5.0	4.7	4.5	4.3
General government										
Overall balance	-4.2	-0.8	0.1	0.2	0.2	0.2	0.4	0.4	0.5	0.5
Gross debt	82.5	80.0	81.0	78.4	75.1	71.8	68.8	65.8	62.9	60.1

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

Table 4. Germany: Balance of Payments, 2009-19

	2009	2010	2011	2012	2013	2014 Proj.	2015 Proj.	2016 Proj.	2017 Proj.	2018 Proj.	2019 Proj.
	(Percent of GDP)										
Current account	5.9	6.4	6.8	7.4	7.5	7.0	6.7	6.4	6.0	5.9	5.7
Trade balance	4.8	5.7	5.4	6.0	6.2	5.6	5.3	5.0	4.7	4.5	4.3
Trade in goods	5.1	5.7	5.3	5.9	6.2	5.5	5.2	4.9	4.6	4.4	4.2
Exports	35.4	40.4	43.4	44.0	42.8	42.4	42.2	42.8	43.4	44.3	45.2
Imports	30.3	34.7	38.1	38.1	36.6	36.8	37.0	37.9	38.8	39.9	41.0
Trade in services	-0.3	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Exports	7.3	7.8	8.0	8.2	8.4	8.0	7.9	8.1	8.3	8.6	8.8
Imports	7.6	7.7	7.9	8.1	8.3	7.8	7.9	8.0	8.2	8.5	8.7
Income balance	2.5	2.2	2.7	2.9	2.8	2.9	2.9	2.9	2.9	2.9	2.9
Receipts	7.5	7.7	8.0	7.7	7.2	7.1	7.8	8.3	8.7	9.2	9.6
Payments	5.0	5.5	5.3	4.9	4.4	4.2	4.9	5.4	5.8	6.3	6.8
Current transfers	-1.4	-1.5	-1.3	-1.4	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5
Capital and Financial Account	-6.7	-5.0	-6.7	-8.4	-9.1	-7.0	-6.7	-6.4	-6.0	-5.9	-5.7
Capital account	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Financial account	-6.7	-5.0	-6.7	-8.4	-9.2	-7.0	-6.7	-6.4	-6.0	-5.9	-5.7
Direct Investment	-1.3	-1.9	-0.6	-1.9	-0.8	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1
Domestic	1.1	1.1	1.2	1.0	0.9	1.0	1.0	1.0	1.0	1.0	1.0
Abroad	2.5	2.9	1.8	3.0	1.7	2.2	2.2	2.2	2.2	2.2	2.2
Portfolio investment balance	-3.6	-4.7	1.2	-2.4	-6.0	-4.6	-4.4	-4.2	-4.0	-3.9	-3.7
Financial derivatives	0.4	-0.7	-1.1	-0.6	-0.6	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
Other financial transactions	-1.8	2.2	-6.1	-3.3	-1.7	-0.8	-0.7	-0.7	-0.6	-0.5	-0.5
Change in reserve assets	-0.4	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net errors and omissions	0.8	-1.3	-0.2	0.9	1.6	0.0	0.0	0.0	0.0	0.0	0.0

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

Table 5. Germany: Core Financial Soundness Indicators for Banks

(In percent)

	2008	2009	2010	2011	2012	2013
Capital adequacy 1/						
Regulatory capital to risk-weighted assets	13.6	14.8	16.1	16.4	17.9	19.2
Commercial banks	13.5	14.9	15.4	15.6	17.8	18.9
Landesbanken	12.7	14.9	17.1	17.7	18.8	21.3
Savings banks	14.4	14.7	15.1	15.8	15.9	16.4
Credit cooperatives	14.2	14.0	14.7	15.6	15.8	16.6
Regulatory Tier I capital to risk-weighted assets	9.5	10.8	11.8	12.1	14.2	15.6
Commercial banks	10.3	12.1	12.9	13.1	15.0	16.1
Landesbanken	8.3	10.5	12.1	12.7	14.0	16.9
Savings banks	9.5	9.7	9.9	10.5	12.5	13.4
Credit cooperatives	9.7	9.5	9.8	10.4	11.1	12.0
Asset composition and quality						
Sectoral distribution of loans to total loans						
Loan to households	24.4	26.3	26.2	26.2	26.8	28.5
Commercial banks	20.5	23.2	22.3	21.4	20.8	22.9
Landesbanken	4.9	5.2	5.4	5.4	5.6	5.8
Savings banks	56.4	57.6	57.7	56.2	57.2	57.4
Credit cooperatives	63.5	66.4	67.0	66.8	68.7	69.3
Loans to non-financial corporations	14.5	14.8	14.6	14.6	14.9	15.6
Commercial banks	12.6	12.9	12.1	11.9	11.5	12.3
Landesbanken	17.8	18.2	18.4	19.1	20.8	22.4
Savings banks	18.7	19.6	20.1	20.3	21.5	22.0
Credit cooperatives	12.7	13.6	14.3	14.1	15.2	16.0
NPLs to gross loans 4/	2.9	3.3	3.2	3.0	2.9	
Commercial banks	2.0	2.3	2.1	2.0	1.9	
Landesbanken	2.4	3.2	4.1	4,1*	4.5	
Savings banks	4.7	4.3	3.8	3.5	3.1	
Credit cooperatives	5.1	4.4	3.9	3.5	3.2	
NPLs net of provisions to capital 4/	25.3	36.9	34.2	31,6*	28.5	
Commercial banks	20.0	29.8	20.4	19,1*	16.4	
Landesbanken	27.6	35.1	46.0	45,6*	46.6	
Savings banks	33.0	39.6	36.2	35,3*	31.5	
Credit cooperatives	33.3	42.1	38.1	34,0*	30.8	

Table 5. Germany: Core Financial Soundness Indicators for Banks (concluded)

(In percent)

	2008	2009	2010	2011	2012	2013
Earnings and profitability						
Return on average assets (after-tax)	-0.3	-0.1	0.2	0.3	0.2	
Commercial banks	-0.5	-0.2	0.1	0	0.1	
Landesbanken	-0.4	-0.3	-0.1	0	0.1	
Savings banks	0.1	0.2	0.4	1.3	0.6	
Credit cooperatives	0.2	0.3	0.5	0.7	0.7	
Return on average equity (after-tax)	-8.1	-2.0	3.7	6.5	5.6	
Commercial banks	-15.1	-5.7	2.0	0.8	3.7	
Landesbanken	-12.2	-8.5	-1.3	-1	2.8	
Savings banks	2.1	4.4	7.1	22.9	9.3	
Credit cooperatives	4.0	5.1	8.0	11.9	11.5	
Interest margin to gross income	84.6	72.5	73.2	72.9	71.5	
Commercial banks	94.6	63.0	62.7	59.8	61.8	
Landesbanken	90.2	81.5	84.4	94.5	82.3	
Savings banks	76.0	78.6	79.1	79.6	79.4	
Credit cooperatives	69.9	76.9	78.9	78	78.2	
Trading income to gross income			4.5	3.7	5.5	
Commercial banks			9.1	9.2	9.9	
Landesbanken			3.9	-4.8	6.7	
Savings banks			0.2	-0.1	0.1	
Credit cooperatives			0.0	0.1	0.1	
Noninterest expenses to gross income	73.4	65.1	63.7	63.9	64.2	
Commercial banks	93.6	73.5	72.5	67.9	67.2	
Landesbanken	54.6	51.1	54.7	59.8	59.6	
Savings banks	68.8	66.6	62.8	62.7	65.7	
Credit cooperatives	68.3	68.3	63.7	63.9	65.9	
Liquidity						
Liquid assets to total short-term liabilities	120.3	144.1	137.0	137.9	144.2	140.5
Commercial banks	114.8	131.1	126.2	124.3	129.5	125.1
Landesbanken	114.5	135.9	131.2	144.3	135.8	138.5
Savings banks	161.8	225.7	216.2	210.1	233.6	234.6
Credit cooperatives	146.1	204.2	203.8	208.4	230.6	231.8
Sensitivity to market risk						
Net open positions in FX to capital	6.6	5.3	4.4	4.5	3.9	3.8
Commercial banks	4.5	3.9	2.2	2.3	2.0	1.8
Landesbanken	5.2	5.5	5.5	7.4	4.8	5.3
Savings banks	12.2	9.6	9.1	7.7	7.8	7.7
Credit cooperatives	8.2	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.

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

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

3/ Due to one off data availability, comparability of 2006 data with other years limited.

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

* Revised data.

Table 6. Germany: Additional Financial Soundness Indicators

(In percent, unless otherwise indicated)

	2008	2009	2010	2011	2012	2013
Deposit-taking institutions						
Capital to assets	4.5	4.8	4.3	4.4	4.7	5.5
Commercial banks	5.0	5.4	4.1	4.0	4.1	4.9
Landesbanken	3.8	4.7	3.9	4.0	4.4	5.0
Savings banks	5.0	5.2	5.4	5.7	6.9	7.5
Credit cooperatives	5.3	5.2	5.5	5.8	6.3	7.0
Geographical distribution of loans to total loans						
Germany	71.2	72.9	74.9	75.7	76.8	76.8
EU-member countries	20.2	19.5	17.6	16.8	16.0	16
Others	8.6	7.6	7.4	7.5	7.2	7.2
FX loans to total loans	12.2	11.5	11.5	11.0	10.5	10
Personnel expenses to noninterest expenses	53.4	54.7	52.7	52	52.9	
Commercial banks	47.6	49.4	46.3	45.5	46.6	
Landesbanken	49.7	51.0	48.8	47.9	49.6	
Savings banks	61.1	62.4	61.9	61.7	62.7	
Credit cooperatives	61.0	61.9	60.5	59.7	59.6	
Trading and fee income to total income	15.4	27.5	26.8	27.1	28.5	
Commercial banks	5.7	37.0	37.3	40.2	38.2	
Landesbanken	9.8	18.5	15.6	5.5	17.7	
Savings banks	24.0	21.4	20.9	20.4	20.6	
Credit cooperatives	30.1	23.1	21.1	22	21.8	
Funding						
Customer deposits to total (non-interbank) loans	77.7	76.5	73.6	73.6	75.7	84.5
Commercial banks	90.7	89.7	85.0	83.1	84.0	104.5
Landesbanken	44.1	34.6	31.5	33.7	33.6	41.6
Savings banks	108.3	109.9	106.9	106.9	107.7	108.5
Credit cooperatives	119.6	122.7	119.0	117.7	118.7	116.9
Deposits/total assets	67.3	67.3	60.8	60.0	61.3	64.6
Commercial banks	76.5	77.2	58.6	58.0	60.3	65.6
Landesbanken	61.3	58.5	52.6	51.4	51.8	55.4
Savings banks	85.8	86.8	86.7	86.7	86.8	86.7
Credit cooperatives	83.8	85.4	85.9	86.3	86.6	86.8
Interbank assets/total assets	43.3	41.3	35.0	34.8	34.3	35.0
Commercial banks	45.5	43.2	32.6	32.7	34.1	35.9
Landesbanken	51.3	47.7	39.1	36.5	34.1	34.8
Savings banks	27.9	26.9	25.3	24.9	22.7	21.2
Credit cooperatives	30.6	29.9	28.2	28.0	26.0	24.2
Interbank liabilities/total assets	28.7	26.7	23.4	21.8	21.7	21.5
Commercial banks	35.1	32.2	24.2	22.5	23.6	22.6
Landesbanken	34.7	30.6	27.0	25.2	24.4	28.0
Savings banks	19.4	18.8	17.4	16.6	15.5	14.1
Credit cooperatives	14.8	15.5	14.1	14.3	14.2	13.2
Securitized funding/total assets						
Commercial banks						
Landesbanken						
Savings banks						
Credit cooperatives						
Loans/assets	40.6	42.1	38.2	37.7	38.4	40.3
Commercial banks	36.1	38.5	27.5	27.3	27.2	30.0
Landesbanken	35.2	36.5	35.0	36.1	38.0	39.5
Savings banks	59.0	59.9	60.9	61.7	62.9	63.7
Credit cooperatives	56.4	56.5	57.4	58.2	59.0	60.6
Securities holdings/assets	22.5	23.5	19.5	18.1	18.0	19.4
Commercial banks	18.5	19.2	12.6	11.0	11.0	13.0
Landesbanken	22.1	23.6	20.1	19.4	19.0	21.7
Savings banks	25.0	26.8	26.6	25.0	25.4	25.2
Credit cooperatives	23.9	27.5	27.5	26.6	27.8	27.4
Off-balance sheet operations to total assets						
of which: interest rate contracts						
of which: FX contracts						
Spread between highest and lowest interbank rates 7/	10.5	15.0	12.8	14.4	11.0	3.0
Spread between reference loan and deposit rates 8/	273	342	343		324	326

Table 6. Germany: Additional Financial Soundness Indicators (concluded)

(In percent, unless otherwise indicated)

	2008	2009	2010	2011	2012	2013
Insurance sector						
Solvency ratio, Life	191.5	186.2	180.8	177	169	
Solvency ratio, Non-life (without reinsurance and health insuranc	315.3	290	314	306	308	
Return on average equity, Life 9/	7.4	9.6	9.8	9.8	9.2	
Return on average equity, Non-life 9/ (without reinsurance and h	3.4	4.2	3.3	2.8	3.2	
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	0.3	0.1	0.3	0.0	0.0
Corporate sector						
Total debt to equity 1/	119.9	108.7	93.5	102.7	91.5	
Total debt to GDP 2/	80.6	78.9	79.2	71.7	72.8	
Return on invested capital 3/ 4/	10.6	7.9	8.6		6.4	
Earnings to interest and principal expenses 1/ 5/	674.9	665.8	788.9	742.7	890.8	923.9
Number of applications for protection from creditors 1/ 6/	13358	16167	15283	14553	13951	14553
Households						
Household debt to GDP 1/	62.0	64.6	62.0	59.8		
Household debt service and principal payments to income 1/ 5/	4.4	3.4	3.2	2.9		
Real estate markets						
Real estate prices, new dwellings 10/	94.8	96.5	100.0	106.3	111.6	
Real estate prices, resale 10/	98.0	97.9	100.0	105.0	111.0	
Real estate prices, new and resale 10/	96.9	97.4	100.0	105.4	111.2	
Real estate prices, commercial property 11/	95.4	97.1	100.0	104.8	109.9	
Residential real estate loans to total loans	15.7	16.9	16.8	16.7	17.1	18.3
Commercial real estate loans to total loans	5.2	5.8	5.7	5.7	5.7	5.9

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

Annex I. Germany: Authorities' Response to Past IMF Policy Recommendations

IMF 2013 Article IV Recommendations	Authorities' Response
Fiscal Policy	
• If fiscal overperformance appears definitive, planned expenditures should be accelerated, especially in areas that enhance growth potential (e.g., public investment).	After an overperformance of 1.1 percent of GDP in 2012, the general government registered a zero balance in 2013, 0.5 percent of GDP stronger than planned. In 2013, it was decided to increase federal spending (including on infrastructure) by €23 billion over 2014-2017 financed by eliminating the small fiscal surplus that would have been achieved without these measures.
• Reform the tax and social security system to further increase labor force participation of the low-skilled and secondary earners	The contribution rate for statutory pension insurance was reduced and the personal basic tax-free allowance for income tax and the monthly pay threshold for mini-jobs were increased in 2013.
Financial Sector Policy	
Sustain the financial reform momentum both domestically and at the regional level:	Further progress on the implementation of FSAP recommendations has been made, but more progress is needed in some areas (see Annex II for details).
• At the domestic level, consolidate financial strength by pushing banks to further augment capital buffers, improve profitability and efficiency, and adjust business models.	Banks' capital ratios keep improving, and some large banks have raised fresh equity. Profitability is under pressure from the low interest environment. Progress has been made on the restructuring of large banks but further efforts are needed.
• Firmly anchor the surveillance of large cross-border banks by strong domestic supervision and close coordination with key financial centers' supervisory authorities.	Joint supervisory teams with the ECB are being established for large cross-border banks ahead of the transition to the SSM. Supervision at the European level is expected to help strengthen the supervision of cross-border activities.
• Keep developing a clear, harmonized, and coherent roadmap towards achieving domestic and European initiatives, including steps towards reversing the fragmentation of banking systems across Europe and creating an integrated pan-European banking system.	Two key pillars of the European Banking Union (SSM, SRM) legislation have been put in place. Progress on establishing recovery and resolution plans has been made but there is little momentum in reforming the fragmented deposit insurance regime. German initiatives on bank structures will have to be meshed with European proposals. Further advances on solving the too-big-to-fail problem will take place at the same pace as regional and global initiatives.
Structural Reforms	
Continue to take measures to raise potential growth and diversify its sources, in particular, by addressing the decline in working-age population and by raising productivity outside of the manufacturing sector.	To increase female labor force participation new spending has been allocated to all-day schools and childcare. However, a pension reform to facilitate early retirement for workers with long contributions period will likely reduce participation by older workers. Steps to strengthen competition in network industries, financing research and development and providing risk capital were taken, but further efforts are needed.

Annex II. Main Outstanding 2011 FSAP Update Recommendations	
Recommendation	Status
Continue to improve 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.	Stress tests (including thorough asset quality reviews) for the large SSM banks (24 institutions) are part of the Comprehensive Assessment which is being carried out by the ECB (in close cooperation with the national competent authorities and the EBA). In this exercise all relevant risk factors of the large German banks are stressed. For the smaller banks the Bundesbank has developed a macroeconomic stress test which covers both expected losses in the credit portfolio and losses resulting from declining profits in an adverse macroeconomic scenario.
Grant supervisors power to vet in advance bank acquisitions of subsidiaries.	Legislative initiatives on this matter are not expected in the near term. As mentioned in the April 2014 FSB Peer Review, the German authorities believe that they would overstep their role as supervisors if they formally vet and give prior approval for major acquisitions proposed by banks; therefore, no changes to the German Banking Act have been made to address this issue. In light of CRD IV, the authorities do expect to continue to review compliance with legal thresholds for qualifying holdings and acquisitions made by banks
Define the role of the Bundesbank as macroprudential supervisor, and institute free exchange of information between macro and microprudential supervisors.	Since 2013, very significant progress has been made in developing and implementing the macroprudential framework. The Financial Stability Committee (FSC) held regular quarterly meetings. During these meetings, the Committee discussed all relevant threats to financial stability. In addition, developments at the European level (e.g. ESRB) were discussed. The FSC will file an annual report to the German Parliament beginning in mid-2014. This will provide more insights into the current activities of the FSC and will inform about the FSC's macroprudential strategy.
Continue to strengthen on-site supervision.	BaFin and the Bundesbank have continued to expand their staff capacity and improve expertise among staff. The intensity of on-site supervisions of banks has been enhanced by increasing the number of inspections. In terms of scope, the number of inspections of non-capital related areas, such as remuneration, liquidity risk management, assessment of complex products, commodities business, IT risks etc., particularly of larger banks, has been further increased. Special inspections with focus on credit risk models and credit risk management have been conducted. Additionally, the

	scope of audits has been broadened by preparing inspections in the area of compliance. Assessing asset quality and credit provisioning processes will play a more important role with the introduction of the SSM in general, especially during the asset quality review of the ECB. Amendments of the Minimum Requirements for Risk Management (MaRisk), a BaFin circular specifying the requirements of the German Banking Act, will be prepared during 2014 in order to specify supervisory expectations, e.g. in the area of outsourcing, and to introduce tougher and more wide-ranging supervisory requirements stemming from international regulations and recent supervisory discussion, which will be subject to future on-site inspections. The new reporting requirements on internal capital adequacy shall provide information to strengthen the supervision of Pillar II requirements and hence also deliver new starting points for intense on-site inspections.
Review reporting requirements to ensure timely and systemic information is available on emerging risk factors.	The implementation of the EBA guidelines on the "Implementing Technical Standards" is to take place in 2014 with a first reference date for COREP reporting as of end of March and for FINREP as of end September accordingly. Beside harmonized reporting requirements also national requirements have been implemented in 2014 with a new "Financial Information Regulation (FinaV)" which provides risk based information on financial measures with the first reference date as of end March 2014 at solo level and of end September 2014 at consolidated level. From 2015 on, additional reporting requirements will provide supervisors with more regular, more structured and more detailed information on the internal capital adequacy of banks. The new reporting requirements have already been implemented into the German Banking Act.
Institute a harmonized and legally binding deposit guarantee of €100,000, backed by adequate prefunding.	The approval of the amended EU Directive on Deposit Guarantee Schemes is expected for mid- 2014. National implementation has to be finalized one year after approval. In Germany, the Deposit Insurance and Investor Compensation Act (EAEG) will have to be amended accordingly by mid 2015. The harmonized and legally binding deposit guarantee of €100,000 is unchanged by the Directive. Terms of prefunding are part of the harmonization efforts and will have to be implemented accordingly at national level. In this respect, the Directive asks for prefunding and defines a concrete "target level" up to the conditions specified in the Directive.

Ensure the financial strength of the new bank restructuring fund, and clarify the interaction between the restructuring fund and the various deposit guarantee and mutual protection schemes.	The Restructuring Fund is fully operational and enjoys access to contingency funding from the federal government. In the context of the establishment of the European banking union, the role of national restructuring funds in relation to the Single Bank Resolution Fund at European level will have to be re-assessed, ending, possibly, in the merger of the German fund into the European fund over a transitional period. 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.
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 and capital injections have been reduced further between 31.12.2012 (€18.8 billion) and 31.12.2013 (€17.1 billion). The two winding up institutions are gradually deleveraging. However, the failure to privatize DEPFA bank in May 2014 will result in the transfer of its remaining assets (€49bn at end-2013) to one of the bad banks (FMS-WM).
Develop 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 challenging circumstances. Overall, for the Landesbanken sector, capital has improved, and business models are being reviewed and streamlined to adapt to the new operating and regulatory environments. Sustaining restructuring efforts is key to ensuring the viability of business models. There are no plans to loosen regional constraints on local banks, open up the public banks to private participation, and reduce non-commercial influences.

Annex III. Germany—Public Debt Sustainability Analysis

Public debt is expected to remain sustainable reflecting ongoing primary surpluses and favorable interest rate-growth differential. Under the baseline, the public debt-to-GDP ratio is forecast to decline steadily to close to 60 percent in the medium term from the current level of 78.4 percent with gross financing needs also reducing gradually to about 13 percent of GDP in 2019. A negative growth shock represents the largest risk to the debt outlook. Realization of contingent liabilities coming from future bank recapitalization needs or worse than expected performance of winding-up institutions may also push the debt trajectory up by about 3 percent of GDP before the debt-to-GDP declines gradually in the medium-term. Interest rate risk is important but remains limited, reflecting the safe haven status of Germany and moderate financing needs.

Background. The new debt sustainability analysis (DSA) framework for market access countries is used to assess Germany's debt sustainability and other risks related to its funding and debt structure. The new framework uses a risk-based approach and expands upon the basic DSA to include: (i) an assessment of the realism of baseline assumptions and the projected fiscal adjustment; (ii) an analysis of risks associated with the debt profile; (iii) macro-fiscal risks; (iv) a stochastic debt projection taking into account past macro-fiscal volatility; and (v) a standardized summary of risks in a heat map.

Macroeconomic assumptions. Growth is projected to reach 1.9 percent in 2014 on the back of a rebound in domestic and foreign demand. Inflation is expected to stay well below 2 percent over the forecast horizon, reflecting the drop in global energy prices while the core inflation remains robust around 1.2 percent on the back of robust wage growth. Growth will average 1.3 percent in the medium term, close to potential. The output gap is closed over 2017-2019.

Germany's high level of government debt calls for using the higher scrutiny framework. Government's gross debt increased significantly over 2009-2010, reflecting sizable fiscal stimulus, large financial sector support and euro zone crisis-related lending. Public debt reached a peak of 82.5 percent of GDP in 2010 from 65.2 percent in 2007. Since the peak, it has declined gradually on the back of fiscal consolidation and favorable interest rate-growth differential. Gross financing needs are estimated at 16 percent of GDP in 2014 and are expected to remain around 13-16 percent in the medium term.

Realism of baseline assumptions. The forecasts of variables affecting debt reduction have been on the conservative side. The median forecast error for real GDP growth during 2005−2013 is 0.63 percent, suggesting that there is slight 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 0.14 percent, suggesting that the staff underestimated inflation, but to a lesser degree in recent years. The median forecast error for primary balance also suggests that staff projections have been conservative (a forecast bias of 1.55 percent of GDP).

Cross-country experience suggests the projected fiscal adjustment is feasible. The maximum 3 year adjustment in the cyclically-adjusted primary balance (CAPB) over the projection period (2 percent of GDP) is not ambitious in cross-country comparison and Germany was able to deliver larger fiscal consolidation in the past.

The DSA framework suggests that under different macroeconomic and fiscal shocks Germany's government debt-to-GDP ratio remains below 80 percent and its gross financing needs remain below 20 percent of GDP. Under the baseline, the debt-to-GDP ratio is projected to decrease to close to 60 percent by 2019. Under most macro-fiscal stress tests, the debt-to-GDP ratio continues to decline, but if there is a one standard deviation shock to real GDP growth, debt-to-GDP ratio initially increases to 78 percent in 2016 and declines thereafter. Gross financing needs under all scenarios remain at or below 20 percent, and decline by a few percentage points by the end of the projection horizon.

List of shocks and stress tests

- **Growth shock.** Under this scenario, real output growth rates are lower by one standard deviation over 2015-2016, i.e. 2.7 percentage points relative to the baseline scenario. 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.

- **Primary balance shock.** This scenario examines the implications of a dual shock of lower revenues and rise in interest rate, leading to a cumulative 1.6% deterioration in primary balance over 2015-2016 (one standard deviation shock to primary balance)

- **Interest rate shock.** This scenario assumes an increase of 300 basis points increase in cost of debt throughout the forecast horizon, mimicking the historical maximum cost of debt experienced.

- **Real exchange rate shock.** This scenario assumes 13 percent devaluation in real exchange rate in 2015 and examines the impact on debt through the inflation channel.

- **Additional stress test: Combined macro-fiscal shock.** This shock combines shocks to real GDP growth, the interest rate, the exchange rate, and the primary balance taking care not to double-count the effects of individual shocks.

- **Additional stress test: Contingent fiscal shock.** This scenario assumes a cumulative 3 percent of GDP (about €80 billion) additional support for the financial sector over 2015-2016 comprising of additional re-capitalization needs in the banking system (€50 billion), a call on half of capital shield guarantees (€20 billion), and worse than expected performance of portfolios of winding-down institutions (€10 billion). While a highly relevant shock, the assumed magnitudes and timing are likely to be on the onerous side.

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

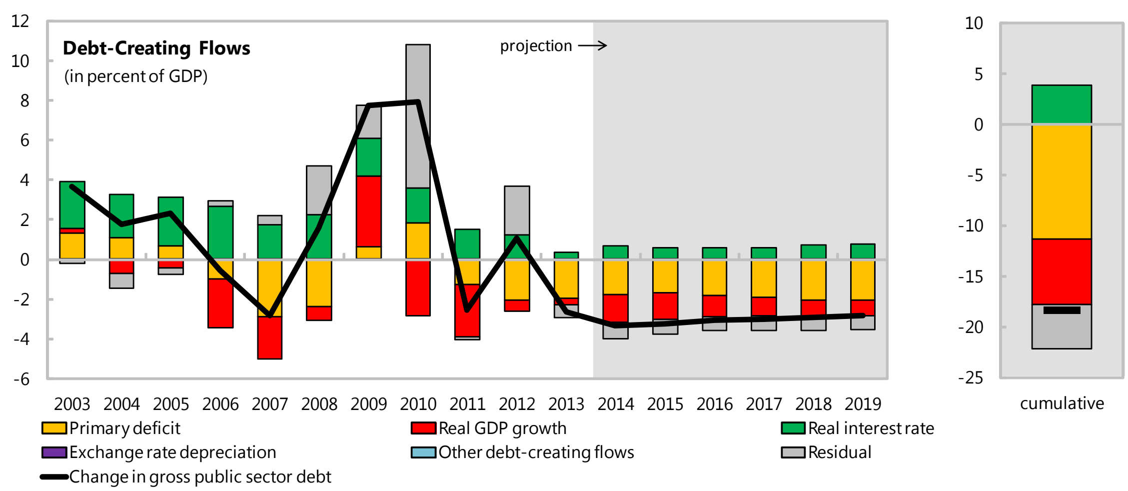
(in percent of GDP unless otherwise indicated)

Debt, Economic and Market Indicators [1]

	Actual			Projections						As of April 01, 2014		
	2003-2011 [2]	2012	2013	2014	2015	2016	2017	2018	2019	Sovereign Spreads		
Nominal gross public debt	70.7	81.0	78.4	75	72	69	66	63	60	EMBIG (bp) 3/		0
Public gross financing needs	16.6	16.3	15.6	15.4	14.8	14.5	14.0	13.4	13.4	5Y CDS (bp)		15
Real GDP growth (in percent)	1.3	0.9	0.5	1.9	1.7	1.5	1.4	1.4	1.3	Ratings	Foreign	Local
Inflation (GDP deflator, in percent)	1.0	1.5	2.2	1.7	1.7	1.6	1.7	1.7	1.7	Moody's	Aaa	Aaa
Nominal GDP growth (in percent)	2.3	2.2	2.7	3.6	3.6	3.2	3.2	3.1	3.1	S&Ps	AAA	AAA
Effective interest rate (in percent) [4]	4.2	3.1	2.6	2.6	2.5	2.5	2.6	2.8	2.9	Fitch	AAA	AAA

Contribution to Changes in Public Debt

	Actual			Projections							
	2003-2011	2012	2013	2014	2015	2016	2017	2018	2019	cumulative	debt-stabilizing primary balance [9]
Change in gross public sector debt	2.1	1.1	-2.6	-3.3	-3.3	-3.0	-3.0	-2.9	-2.8	-18.4	
Identified debt-creating flows	1.0	-1.4	-2.0	-2.5	-2.5	-2.3	-2.3	-2.2	-2.1	-14.0	
Primary deficit	-0.2	-2.1	-2.0	-1.8	-1.7	-1.8	-1.9	-2.1	-2.1	-11.3	-0.1
Primary (noninterest) revenue and gran	43.8	44.4	44.4	44.2	43.9	43.8	43.9	43.8	43.8	263.4	
Primary (noninterest) expenditure	43.5	42.3	42.4	42.4	42.2	42.0	41.9	41.7	41.7	252.0	
Automatic debt dynamics [5]	1.2	0.7	0.0	-0.7	-0.8	-0.5	-0.4	-0.2	-0.1	-2.7	
Interest rate/growth differential [6]	1.2	0.7	0.0	-0.7	-0.8	-0.5	-0.4	-0.2	-0.1	-2.7	
Of which: real interest rate	2.1	1.2	0.3	0.7	0.5	0.6	0.6	0.7	0.7	3.8	
Of which: real GDP growth	-0.9	-0.5	-0.4	-1.4	-1.4	-1.1	-0.9	-0.9	-0.8	-6.5	
Exchange rate depreciation [7]	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	
#TSREF# (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 Euroa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Residual, including asset changes [8]	1.2	2.4	-0.6	-0.8	-0.8	-0.7	-0.7	-0.7	-0.7	-4.4	



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

5/ Derived as [(r - π(1+g) - g + ae(1+r)]/(1+g+π+gπ)) 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).

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

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

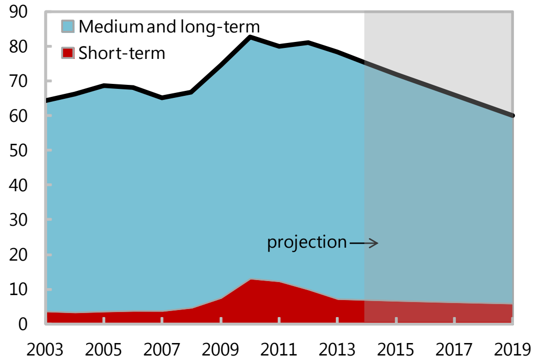
8/ Includes asset changes and interest revenues (if any). For projections, includes exchange rate changes during the projection period.

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

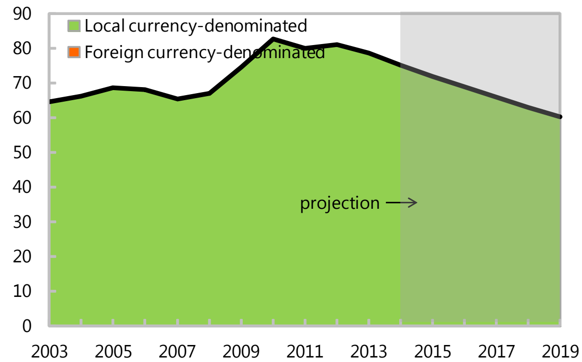
Germany Public DSA - Composition of Public Debt and Alternative Scenarios

Composition of Public Debt

By Maturity
(in percent of GDP)



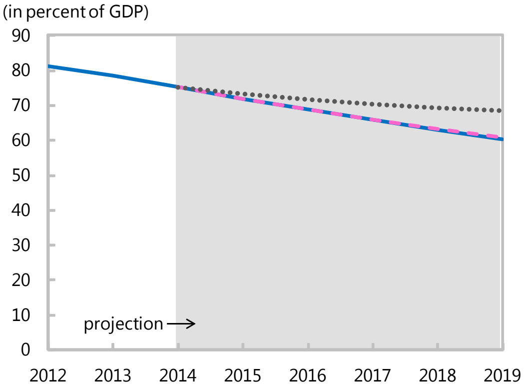
By Currency
(in percent of GDP)



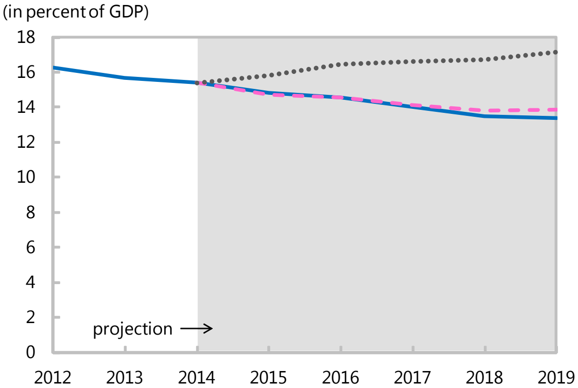
Alternative Scenarios

Baseline   Historical   Constant Primary Balance

Gross Nominal Public Debt
(in percent of GDP)



Public Gross Financing Needs
(in percent of GDP)



Underlying Assumptions
(in percent)

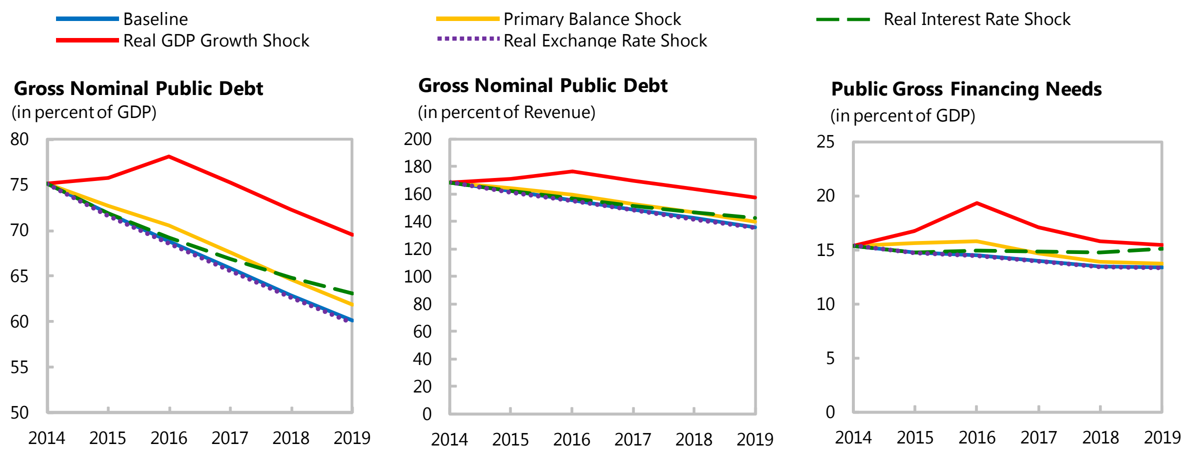
Baseline Scenario	2014	2015	2016	2017	2018	2019
Real GDP growth	1.9	1.7	1.5	1.4	1.4	1.3
Inflation	1.7	1.7	1.6	1.7	1.7	1.7
Primary Balance	1.8	1.7	1.8	1.9	2.1	2.1
Effective interest rate	2.6	2.5	2.5	2.6	2.8	2.9
Constant Primary Balance Scenario						
Real GDP growth	1.9	1.7	1.5	1.4	1.4	1.3
Inflation	1.7	1.7	1.6	1.7	1.7	1.7
Primary Balance	1.8	1.8	1.8	1.8	1.8	1.8
Effective interest rate	2.6	2.5	2.5	2.6	2.8	2.9

Historical Scenario	2014	2015	2016	2017	2018	2019
Real GDP growth	1.9	1.3	1.3	1.3	1.3	1.3
Inflation	1.7	1.7	1.6	1.7	1.7	1.7
Primary Balance	1.8	0.7	0.7	0.7	0.7	0.7
Effective interest rate	2.6	2.5	2.9	3.2	3.5	3.9

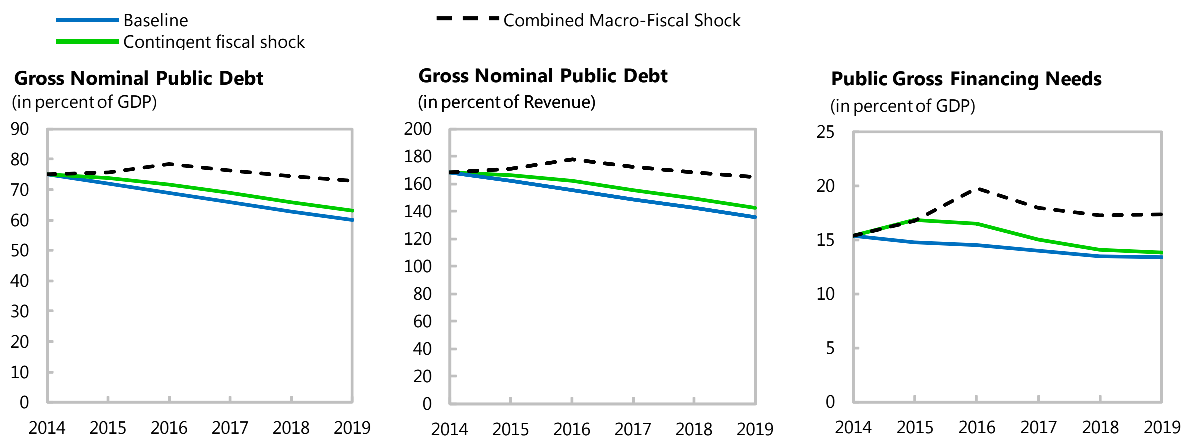
Source: IMF staff.

Germany Public DSA - Stress Tests

Macro-Fiscal Stress Tests



Additional Stress Tests



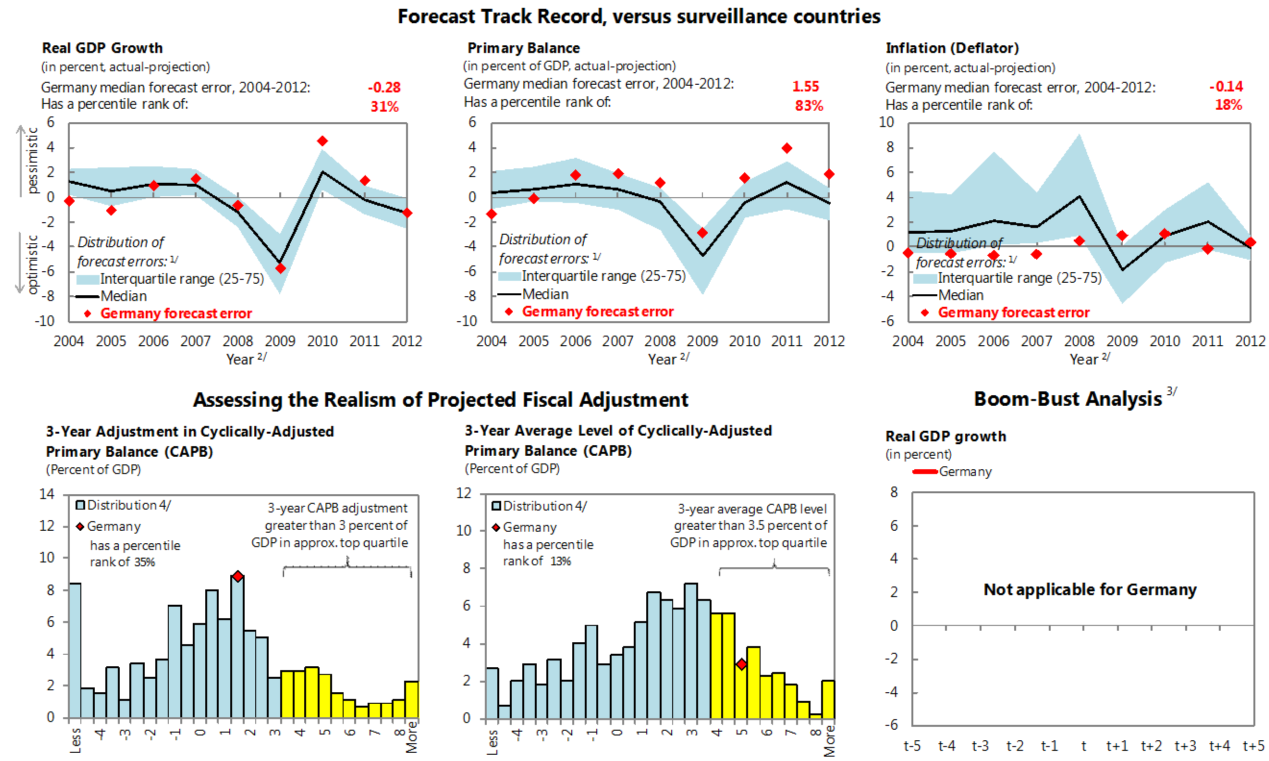
Underlying Assumptions
(in percent)

Primary Balance Shock	2014	2015	2016	2017	2018	2019
Real GDP growth	1.9	1.7	1.5	1.4	1.4	1.3
Inflation	1.7	1.7	1.6	1.7	1.7	1.7
Primary balance	1.8	0.9	1.0	1.9	2.1	2.1
Effective interest rate	2.6	2.5	2.6	2.7	2.8	3.0
Real Interest Rate Shock						
Real GDP growth	1.9	1.7	1.5	1.4	1.4	1.3
Inflation	1.7	1.7	1.6	1.7	1.7	1.7
Primary balance	1.8	1.7	1.8	1.9	2.1	2.1
Effective interest rate	2.6	2.5	3.1	3.6	4.1	4.6
Combined Shock						
Real GDP growth	1.9	-0.8	-1.1	1.4	1.4	1.3
Inflation	1.7	1.0	1.0	1.7	1.7	1.7
Primary balance	1.8	0.3	-1.1	1.9	2.1	2.1
Effective interest rate	2.6	2.5	3.2	3.7	4.2	4.7

Real GDP Growth Shock	2014	2015	2016	2017	2018	2019
Real GDP growth	1.9	-0.8	-1.1	1.4	1.4	1.3
Inflation	1.7	1.0	1.0	1.7	1.7	1.7
Primary balance	1.8	0.3	-1.1	1.9	2.1	2.1
Effective interest rate	2.6	2.5	2.6	2.9	2.9	3.1
Real Exchange Rate Shock						
Real GDP growth	1.9	1.7	1.5	1.4	1.4	1.3
Inflation	1.7	2.1	1.6	1.7	1.7	1.7
Primary balance	1.8	1.7	1.8	1.9	2.1	2.1
Effective interest rate	2.6	2.5	2.5	2.6	2.8	2.9

Source: IMF staff.

Germany Public DSA - Realism of Baseline Assumptions



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

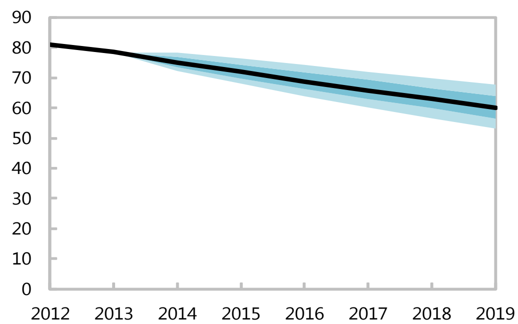
Debt level [1/]	Real GDP Growth Shock	Primary Balance Shock	Real Interest Rate Shock	Exchange Rate Shock	Contingent Liability shock
Gross financing needs [2/]	Real GDP Growth Shock	Primary Balance Shock	Real Interest Rate Shock	Exchange Rate Shock	Contingent Liability Shock
Debt profile [3/]	Market Perception	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

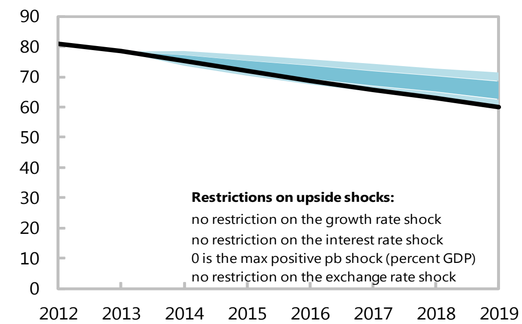
(in percent of GDP)

Baseline　Percentiles: 10th-25th　25th-75th　75th-90th

Symmetric Distribution



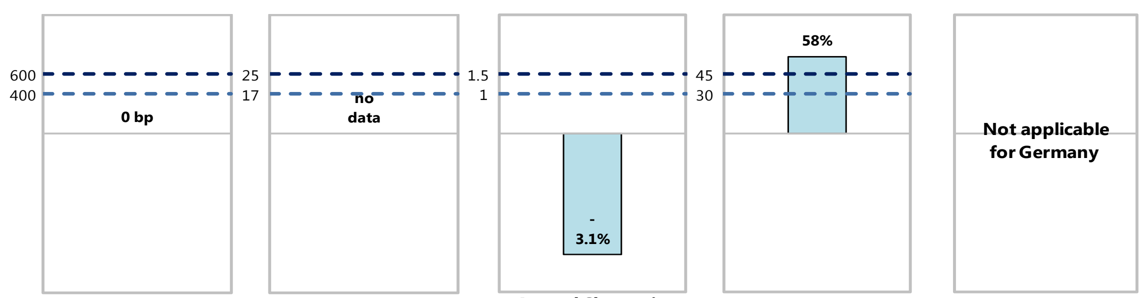
Restricted (Asymmetric) Distribution



Debt Profile Vulnerabilities

(Indicators vis-à-vis risk assessment benchmarks, in 2013)

Germany　Lower early warning　Upper early warning



Bond spread	**External Financing Requirement**	**Annual Change in Short-Term Public Debt**	**Public Debt Held by Non-Residents**	**Public Debt in Foreign Currency**
(in basis points) 4/	(in percent of GDP) 5/	(in percent of total)	(in percent of total)	(in percent of total)

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, 01-Jan-14 through 01-Apr-14.

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 I. Draft Press Release

Press Release No. 14/xx
FOR IMMEDIATE RELEASE
[Month, dd, yyyy]

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

IMF Executive Board Concludes Article IV Consultation with Germany

On [Month, dd, yyyy], the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation[1] with Germany.

Background

A recovery is under way, led by domestic demand and underpinned by healthy corporate and household balance sheets, a strong labor market, a much improved fiscal position, and accommodative financial conditions. As growth returned in mid-2013, the unemployment rate reached a post-unification low, while the labor force continues to expand on the back of strong immigration and increasing participation. Headline inflation has been on a downward trend reflecting falling import prices and contained wage pressures, but core inflation has been stable around 1.2 percent. The fiscal stance in 2013 was contractionary and fiscal consolidation has put the debt-to-GDP ratio firmly on a downward path. The current account surplus reached a new high in 2013, as lower surpluses vis-à-vis the euro area periphery were offset by larger ones vis-à-vis economies outside of Europe. While credit conditions remain favorable, credit growth has been lackluster, reflecting low demand despite the upturn in the housing market.

The German banking system is downsizing and gradually strengthening. While profitability remains subdued and under pressure from persistently low interest rates, improvements in capital adequacy continued, as banks prepared to meet upcoming stricter regulatory requirements and the ECB Comprehensive Assessment got under way.

[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.

The short-term outlook is for GDP growth to gain momentum. As domestic demand growth becomes more broad-based, output should increase by [1.9] percent this year and [1.7] percent the next, and the current account surplus should begin to decline gradually. Inflation should pick up and remain above that in the rest of the euro area as the residual slack in the economy is eliminated. Growth in the medium term, however, is expected to remain constrained by the still weak and precarious international environment, lingering uncertainty (including about future energy costs), and fast approaching adverse demographic developments.

Executive Board Assessment[2]

<   >

[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.