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**Assessment of the 2011 national reform programme and stability programme for
GERMANY**

Accompanying the document

Recommendation for a

COUNCIL RECOMMENDATION

**on the National Reform Programme 2011 of Germany and delivering a Council Opinion
on the updated stability programme of Germany, 2011-2014**

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1. INTRODUCTION

As an open, heavily export-oriented economy, Germany was severely hit by the crisis. However, benefiting from the recovery in world trade and strong demand for investment goods, the economy rebounded with domestic demand becoming the strongest driver of growth in 2010, and thus confirming the gradual broadening of the upswing. After a temporary deterioration during the crisis, German competitiveness continued to improve in 2010 and thanks to its strong growth, the Germany economy became a major growth engine for the EU as a whole.

Starting from a favourable budgetary position ahead of the crisis, the fiscal deterioration was almost entirely driven by the fiscal stimulus aimed at alleviating the consequences of the downturn. However, the swift economic recovery and the remarkably robust labour market led to a considerable improvement in the public finances already in 2011. The determination of the government to further consolidate public finance and to implement structural reforms is confirmed in the 2011 update of the Stability Programme (SP) submitted on 27 April 2011 and the 2011 National Reform Programme (NRP) submitted to the European Commission on 7 April 2011. The NRP also includes the commitments of Germany under the Euro Plus Pact to the objectives of fostering competitiveness, employment, public finance sustainability and financial stability.

2. RECENT ECONOMIC DEVELOPMENTS AND OUTLOOK

2.1. RECENT ECONOMIC DEVELOPMENTS

The German economy entered the crisis in a relatively solid position, following an earlier prolonged adjustment process. Against the backdrop of sluggish growth and a weak labour market performance, the tackling of overdue structural reforms had started in the first half of the 2000s, including major adjustments of the tax-benefit system and employment services ("Hartz reforms"). Adjustments made by the public and corporate sectors rendered the labour market more flexible, improved competitiveness and strengthened the profitability of firms, thus establishing the fundamentals for a pick-up in investment and growth after 2005. Healthy export growth driven by strong external demand and restored cost competitiveness coupled with still relatively subdued domestic demand resulted in a widening current account surplus. Unemployment embarked on a downward trend, while the absence of a domestic housing boom helped to contain household debt.

Given Germany's large export-oriented manufacturing sector and specialisation in investment goods, production was severely hit by the global crisis. The slump in world trade resulted in a collapse of exports and investment in 2009 and real GDP contracted by an unprecedented 4.7%. Nevertheless, after a small rise, unemployment has been falling since late 2009. The surprising resilience of the labour market reflects the beneficial effects of past reforms including more flexible working-time arrangements facilitating a reduction in hours worked, as well as public subsidies for short-time work. Together with fiscal stimulus measures, such developments helped limit the impact of the crisis on households and private consumption.

The crisis revealed serious vulnerabilities in the German banking sector. Heavy losses and write-downs from international investments in subprime loans and structured assets weakened the capital base of some banks, notably including some *Landesbanken*. Measures adopted by the government to stabilise the financial sector include the provision of guarantees of up to one-sixth of GDP and capital injections with a deficit-increasing impact of almost 1% of GDP

so far. The debt-increasing effects related to the "bad bank" scheme that removed impaired assets from bank balance sheets exceed 10% of GDP¹.

Public finances deteriorated considerably in the wake of the crisis. From a slight surplus in 2007-08, the general government balance relapsed into a deficit of 3% of GDP in 2009, driven by fully-operating automatic stabilisers and a wide range of measures adopted by the German authorities. In addition to financial-sector support measures, these comprised a sizeable fiscal stimulus to provide relief to households and firms, to increase public infrastructure investment and to stabilise the labour market.

The German economy has rebounded strongly from the recession. Real GDP rose by 3.6% in 2010, the highest growth rate since the early 1990s. Exports largely reversed the massive decline recorded in 2009 and paved the way for a more broad-based recovery. The largest growth contribution came from domestic demand. Investment saw a rebound, while rising employment and hours worked supported private consumption.

This swift recovery can be explained by a number of factors. First and foremost, the economic crisis hit Germany primarily through the temporary slump in world trade. Previously mentioned major structural reforms had strengthened economic fundamentals. Unlike other countries, the German economy had not experienced any domestic housing, asset or credit boom prior to the crisis and is therefore now not held back by the need to address resulting imbalances. Finally, with its specialisation in capital goods, the German export sector was particularly well placed to benefit from the demand boom in emerging markets and the incipient global recovery.

The widening of the general government deficit to 3.3% of GDP in 2010 mainly reflects a still-expansionary fiscal policy. The debt-to-GDP ratio rose from 66% in 2008 to 83.2% in 2010, with financial-sector-support measures accounting for around 12% of the rise. Fiscal retrenchment plans, also responding to the requirements under the excessive deficit procedure² and the new constitutional budgetary rule³, imply that economic activity over the next few years will take place against the backdrop of a restrictive fiscal policy stance. However, the mainly expenditure-based consolidation largely spares growth-enhancing items from cuts.

2.2. OUTLOOK

Looking forward, economic growth should moderate somewhat but remain above potential in 2011-12. The Commission services' Spring 2011 Forecast projects increases in real GDP of 2.6% in 2011 and 1.9% in 2012. Further gradual employment gains and a pick-up in wage growth due to increasing labour market tightness should underpin the momentum in private consumption. Likewise, full order books, favourable real interest rates and lower capital exports following the end of foreign asset booms should further sustain domestic investment. While export growth should remain dynamic reflecting expanding world trade, the continuing strength of domestic demand should further stimulate import growth. As a result of the ongoing reorientation of growth towards domestic demand, the current account surplus should narrow gradually. While consumer price inflation is projected to accelerate to 2.6% in 2011,

¹ The estimates take into account all operations undertaken at all levels of government since the start of the financial crisis in 2008 including the impact related to the creation of the "bad-banks" established from the Hypo Real Estate (HRE) – FMS-WM and WestLB – Erste Abwicklungsanstalt (EAA).

² See Council Recommendations to Germany of the 2 Dec. 2009, available at: http://ec.europa.eu/economy_finance/sgp/pdf/30_edps/104-07_council/2009-12-02_de_126-7_council_en.pdf

³ The constitutional budgetary rule prescribes a structural deficit ceiling of 0.35% of GDP for the Federal Government from 2016 onwards and balanced structural budgets for the Länder as of 2020.

mainly driven by energy prices, it should fall to 2% in 2012. With the economic recovery well established, the general government deficit is projected to fall to 2% of GDP in 2011 and to 1.2% in 2012.

Medium-term growth prospects have not been significantly dented by the crisis, with Commission services' estimates indicating that potential growth could average around 1½% in 2011-15. Investment prospects remain healthy. Furthermore, there is no evidence that the crisis has brought about an increase in structural unemployment or affected prospects for total factor productivity growth.

The macroeconomic outlook is subject to risks, mainly deriving from external developments. Export prospects would be dented by any deterioration of the outlook for Germany's main trading partners, e.g. through a prolonged increase in inflation resulting from persistence of current energy price developments, which could also dampen domestic demand. Should further disruptions in financial markets materialise, resulting losses in the banking sector could hamper the upswing via a detrimental effect on credit supply. Finally, emerging shortages in the labour market, with further cyclical tightening compounding demographic trends, could become a major bottleneck to growth in the medium term.

3. MONITORING, PROCEDURAL ISSUES AND GOVERNANCE

The German Government submitted the NRP and the update of the SP to the European Commission on 7 April and on 27 April 2011, respectively. The German *Bundestag* and the *Bundesrat* were consulted on both the NRP and the SP, while social partners (trade unions and employers' associations) were only consulted on the NRP. Germany has ensured close coherence between its NRP and SP. The two documents outline in an integrated manner the fiscal consolidation efforts on the one hand and key structural reforms underpinning macroeconomic stabilisation on the other. They are based on a common macroeconomic outlook. The SP covers the period 2011-2015. In the NRP, the national targets in the fields of employment, R&D, energy and climate change, education and poverty reduction are outlined (see Table 1). The NRP also presents the measures of the German Action Programme 2011 for the Euro Plus Pact with a view to enhancing competitiveness, employment, public finance sustainability and financial stability (see Box 1).

Table 1: German Europe 2020 targets

Europe 2020 targets	Current situation in Germany ⁴)	German Europe 2020 target in the NRP
R&D investment (% of GDP)	2.82%	3%
Employment rate (%)	74.9% (2010)	77%
Early school leaving (%)	11.1%	10%
Tertiary education attainment (%)	40.8%	42%
Reduction of number of people in or at risk of poverty	16.2 million people 6.5 million people living in households with zero or very low work intensity	20% of the long-term unemployed, 330 000 people (660 000 people living in jobless households)
Energy efficiency – reduction of energy consumption in Mtoe ⁵		Reduction in primary energy consumption: 38.3 Mtoe
Reduction in greenhouse gas emissions (from sources not covered by the Emission Trading System)	-3% ⁶	-14% ⁷

⁴ Eurostat figures

⁵ As estimated by the Commission. Mtoe = Million tonnes of oil equivalent

Renewable energy (% of total energy use)	9.7%	18%
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4. POLICY CHALLENGES AND ASSESSMENT OF POLICY AGENDA

4.1. CHALLENGES

Germany faces inter-related medium-term policy challenges: addressing the remaining structural weaknesses in the labour market and the education system in relation to skill shortages in the banking sector, the service sector and network industries and ensuring growth-friendly consolidation of the public finances.

Sustaining the positive trends in employment and unemployment will be critical to counter the negative effects of demographic change on labour supply and would also help to strengthen private consumption. Demographic developments also underline the importance of the recent reforms to increase the statutory retirement age in response to higher life expectancy, as well as of further strengthening the labour force participation of older workers in the labour force. Although unemployment is falling, long-term unemployment and high unemployment among low-skilled workers, particularly with a migrant background, remain a challenge. Furthermore, the tax wedge remains high, in particular for low- and middle-wage earners, reducing incentives for job creation, private investment and labour force participation. Wage increases are therefore only partly translated into higher disposable income and thus domestic demand. However, any review of the tax-benefit system would have to consider the need to ensure sustainable financing and adequacy of the social security system.

Encouraging competition in the service sector would foster productivity growth and support domestic demand. Despite considerable progress in recent years, *inter alia* through the implementation of the Services Directive, there is scope for further reducing entry and exit barriers, notably by further simplifying the license and permit system. Regulation of certain professional services (e.g. engineers, architects, pharmacists and lawyers) seems to be more stringent compared with other countries and regulatory barriers for crafts also appear high. Furthermore, the high tax wedge and non-wage labour costs are likely to impose a particular burden on labour-intensive services, stifling their development. As regards competition in network industries, an effective unbundling of infrastructure management and transport services in the railway sector remains particularly crucial to fostering further competition.

Continued reforms to improve the quality of the education system and access to it are central for addressing emerging shortages of skilled labour in order to maintain Germany's comparative advantage in technologically-advanced products and to reverse the trend of declining productivity growth, laying the basis for sustained employment and real income growth. In the past, educational attainment rates in Germany improved only slowly, both at the upper secondary and at the tertiary levels and are today below the EU average; especially for younger cohorts⁸. Combined with ongoing demographic change, which leads to a

⁶ This quantity corresponds to the 2005-2008 evolution of the emissions not covered by the EU Emissions Trading System. As the scope of the Emissions Trading System evolved between 2005 and 2008, these emissions are estimated on the basis of the main relevant UNFCCC source categories (as opposed to the difference between total emissions and EU ETS verified emissions).

⁷ The national emissions limitation target defined in Decision 2009/406/EC (or "Effort Sharing Decision") concerns the emissions not covered by the EU Emissions Trading System. It is expressed as the minimum relative decrease (if negative) or the maximum relative increase (if positive) compared to 2005 levels.

⁸ Germany is one of the few countries that chose to include ISCED Level 4 into its definition of the tertiary attainment target. Including ISCED Level 4, the current rate of tertiary attainment in Germany rises from 29.4% (ISCED Level 5 and 6) to 40.8%, which makes the target of 42% not particularly ambitious.

shrinking cohort size, this might result in a shortage in the supply of medium-to-highly qualified labour in the medium and long terms, particularly in maths, science and technology subjects.

Reconciling budgetary consolidation with a reallocation of public expenditure towards growth-enhancing items would be essential to support the economy's growth potential. The largely growth-friendly consolidation currently planned would benefit from further qualitative improvements, notably from comprehensive reforms to address structural weaknesses in the health-care and long-term care systems, also with a view to increasing the efficiency of social spending. The new constitutional budgetary rule provides an important anchor for credible consolidation. However, following implementation by the *Bund*, the rule still needs to be implemented and enforced at the *Länder* level, while strengthening the associated monitoring and sanction mechanism would further enhance fiscal credibility.

Preserving the stability and restructuring of the banking sector are necessary to underpin a buoyant investment climate. Parts of the German banking system were heavily exposed to investments in mortgage-backed securities abroad and bank balance sheets have weakened in the wake of the crisis. Even prior to the crisis, some state-owned *Landesbanken* had suffered from a lack of effective risk management structures and the absence of a viable business model. They played a particularly active role in investing in structured assets and real estate markets abroad. Further reform of the banking sector, including restructuring of the *Landesbanken* in need of a viable business model and adequate capital base and strengthening of the regulatory and supervisory framework, would not only facilitate a more efficient allocation of domestic savings as a means of underpinning domestic demand and in particular investment, but would also help safeguard the stability of the financial sector.

Box 1: German Action Programme 2011 for the Euro-Plus-Pact (EPP)

On 23 March 2011, the German government agreed on the Action Programme for the EPP and subsequently included the Programme in the 2011 NRP. In line with the objectives set by the EPP, the Action Programme 2011 contains measures to foster (i) competitiveness, (ii) employment, (iii) public finance sustainability and (iv) financial stability.

With the aim of fostering competitiveness, measures outlined in the Programme focus on network industries, the energy and service sector (i.e. market transparency agency for the electricity and gas sector, a programme on electromobility, increased funding of transport infrastructure) as well as on education (i.e. Initiative for Excellence to promote graduate schools, funding of the University Pact). Measures to foster *employment* focus on labour market participation (reform of active labour market instruments, improved incorporation of professionals with foreign qualifications and integration of migrants) and education (i.e. Basic Education Pact). To further improve *public finance sustainability*, the Programme states that the excessive deficit will be corrected already in 2011 and that targets provided by the national budgetary rule will be achieved with a wide margin in 2011/2012. Measures to reinforce *financial stability* are aimed at more efficient regulation and supervision of the capital market (i.e. strengthened investor protection, Bank Restructuring Act).

The measures listed in the German Action Programme 2011 broadly correspond to the macroeconomic bottlenecks identified in the report endorsed at the ECOFIN meeting in June 2010 in the context of the "Europe 2020-Strategy". The Programme largely reflects the reform agenda presented in the NRP, but measures do not go substantially beyond the NRP. Several important policy challenges remain unaddressed (e.g. restructuring of the *Landesbanken* or the still-high tax wedge) or are only touched upon (opening of the service sector). Given the significance of the challenges ahead, further efforts would be required to ensure the stability of the financial system and strengthen domestic sources of growth.

4.2 ASSESSMENT OF THE POLICY AGENDA

4.2.1. Macroeconomic policies

4.2.1.1. Public finances

The macroeconomic scenario underlying both the updated SP and the NRP envisages real GDP expanding by 2.3% in 2011 before decelerating to 1.8% in 2012 and to an average of 1.5% in 2013-15⁹ (see Table II in the annex). Domestic demand would be the main growth driver and would also stimulate imports, implying a rapidly narrowing net trade contribution despite still dynamic exports. The programme's real GDP growth projection for 2011 is around 0.25% lower than the Commission services' 2011 spring forecast¹⁰, mainly reflecting weaker domestic demand. The growth outlook for 2012 and the projections for 2013-15 are broadly in line with the Commission services' forecasts. Therefore, assessed against currently available information, including the Commission services' forecast, the macroeconomic scenario is cautious for 2011 and plausible thereafter. The programme's inflation forecast is somewhat low especially for 2011¹¹, given current pressure from energy prices. The programme's lower domestic demand deflators in 2012 result in 0.5% lower nominal GDP growth projections. Given ongoing positive labour market developments, the Commission services' forecast projects slightly higher employment and wage growth in 2011 and 2012. Cyclical conditions as measured by the output gap (as recalculated by the Commission services¹²), improve steadily from a still negative gap in 2010 (-2% of potential output) to a slightly positive one in 2015 (0.25 %). Output gap developments in 2011-12 are broadly in line with the Commission services' estimates.

Despite a still-sizeable fiscal stimulus and bank support measures, the increase in the general government deficit in 2010 was contained thanks to the remarkably swift recovery of the German economy. According to the programme, the deficit widened marginally from 3% of GDP in 2009 to 3.3% of GDP in 2010. The deficit was still driven by generous expansionary measures adopted in line with the European Economic Recovery Plan (EERP) to counter the economic downturn (around 1% of GDP¹³). The previous programme had projected a much higher deficit of 5.5% of GDP. After controlling for the denominator effect, this much better-than-expected outcome was driven by substantial windfall revenues achieved due to more favourable macroeconomic developments (around 1.5% of GDP) and positive expenditure surprises arising from further improvements on the labour market, lower interests payments due to persistent low interest rates and lower investment outlays¹⁴ (around 0.5% of GDP). The positive expenditure surprise occurred despite the unexpected cost of the one-off measure related to the creation of the HRE 'bad-bank' (around 0.5% of GDP); this was, however, partly compensated for by another one-off effect resulting from the sale of the UMTS licences (around 0.25% of GDP). Overall, the net deficit-increasing effect of the one-off measures amounted to 0.25% of GDP¹⁵.

⁹ An updated forecast with growth revised to 2.6% in 2011 and 2.0% in 2012 could not serve as a basis for the programme given submission deadlines was published by the government on 14 April 2011.

¹⁰ Hereafter referred to as "Commission services' forecast".

¹¹ As measured by the private consumption deflator (2011: projections of 1.7% vs. 2.2%).

¹² Based on the data provided in the programme following the commonly-agreed methodology.

¹³ Commission services' estimates of net fiscal stimulus, i.e. all expansionary measures less restrictive measures, on a year-on-year basis.

¹⁴ The bulk of the additional resources was used to finance the already-planned projects.

¹⁵ In addition, the 2010 one-off measures included revenue losses resulting from the Court ruling on the tax deductibility of offices at home.

Supported mainly by continued favourable cyclical developments and to a lesser extent by the consolidation measures, the general government deficit is projected, by both the Commission services and the national authorities, to decline to well below 3% of GDP in 2011. Germany is thus expected to correct its excessive deficit two years ahead of the deadline set by the Council. While the Commission services expects a deficit of 2% of GDP and the German government of 2.5% of GDP in 2011, the previous programme had projected a deficit still well above the reference value of 4.7% of GDP. After controlling for the denominator effect, this better-than-earlier projected outlook is mainly due to a higher tax revenue elasticity and a better starting position at the end of 2010. Expenditure is also expected to turn out lower. The more optimistic deficit estimate for 2011 of the Commission services compared with the programme can be partly explained by the improved labour market outlook and more favourable assumptions regarding wage increases, translating into higher tax and social contributions revenue. Moreover, in line with the no-policy-change assumption, the Commission forecast does not yet include the revenue-decreasing effects of the retroactive tax reimbursements resulting from the ruling of the European Court of Justice on taxation of foreign dividend income.

Germany's goal over the medium-term is to achieve a general government budget that is close to balance, i.e. a structural deficit of 0.5% of GDP¹⁶. While the previous programme did not foresee the achievement of the medium-term objective (MTO) within the programme period, the 2011 update projects that the MTO will be reached in 2014¹⁷. The medium-term targets, both in nominal and structural terms, differ substantially from the adjustment path set out in the previous programme, due to a much more optimistic macroeconomic scenario.

The programme projects a steady improvement in the general government balance from 2011 onwards, benefiting from favourable macroeconomic developments, the expiry of certain fiscal stimulus measures until 2012 and federal retrenchment efforts. In nominal terms, consolidation is frontloaded to 2011 and 2012 – with respective adjustment efforts of around 0.75% and 1% – followed by smaller annual steps of around 0.5% each in 2013 and 2014 and a marginal improvement in 2015 (see Table III in the annex). The envisaged consolidation is chiefly expenditure-driven, with nominal growth of primary expenditure below nominal GDP growth, whereas additional revenue is expected from a limited number of targeted new levies and taxes. Importantly, for the expenditure savings not yet backed up by specific measures (around 0.25% of GDP in 2014 and 2015 respectively) the programme allocates the adjustment uniformly across all spending items except for interest payments. Additional measures are still needed to reach the targets for the period 2013-2015 (see Box 1). The programme does not envisage any one-off measures between 2012 and 2015.

The expected consolidation is projected to be achieved mainly at the Federal level (around 1.75% of GDP over the period 2011-2015) and to a lesser extent by the *Länder* (almost 0.75%) and the communes (around 0.5%). Consequently, the communes are expected to reach a close-to-balance budgetary position in 2012, while the *Länder* should follow in 2014. However, regarding the communal outcomes the programme states that "in comparison to the previous estimate, a mix of additional investment expenditure, lower *Länder* transfers and a more favourable balance was assumed". The budgets of social security funds are projected to be close-to-balance. The programme already anticipates the fall in the contribution rate to the statutory pension insurance from 19.9% to 19.1% by 2014 as a result of the projected increase

¹⁶ In cyclically-adjusted terms and excluding one-off and temporary measures.

¹⁷ As specified in the programme, the MTO for Germany of 0.5% of GDP is independent of both possible calculation methods, i.e. it does not depend on the assumption regarding the share of pre-financing of ageing-related costs until 2040.

in the sustainability reserve (*Nachhaltigkeitsrücklage*). On the expenditure side, the results hinge crucially on the assumption that the reduction in the federal contribution to the Federal Employment Agency will be compensated by expenditure savings through efficiency gains at the Agency.

Box 1. Main measures

As of 2011, the German government is implementing the federal consolidation package of around 80 bn euro until 2014. This implies annual federal consolidation steps of around 0.5% of GDP in 2011 and around 0.25% of GDP on average in the years 2012-2014¹⁸. Regarding the expenditure side, the bulk of the retrenchment effort will be concentrated on certain social and family benefits (including reduced support for the unemployed, abolition of parental allowance for the long-term unemployed) and cost savings in the public sector (including wage restraint, employment cuts and reductions in administrative costs). Importantly, the additional expenditure on education and R&D investment (around 0.5% of GDP over the period 2010-2013) is exempt from cuts and the investment will be maintained at the 2013 level also in the outer years of the Programme. However, no specific spending path in annual terms has been provided. The corporate sector will contribute to consolidation via abolition of eco-tax-subsidies, an air traffic charge, a bank levy and a nuclear fuel tax. In addition, the contribution rate to the statutory health-care insurance has been increased from 14.9% to 15.5% as of 2011 and some measures have been taken to curb expenditure growth in 2011 and 2012. Also, the contribution rate to unemployment insurance was increased from 2.8% to 3% as of 2011. However, some of the measures are surrounded by uncertainties, e.g. a tax on the use of nuclear fuel (0.1% of GDP as of 2011) that is coupled with the prolongation of operation times for nuclear plants still remains a hotly debated issue. Also the reform of the German *Bundeswehr* – expected by the Programme to bring cumulative savings between 2011 and 2015 of around 0.25% of GDP – is also a topic of intense discussion. Moreover, cuts in public administration mostly rely on yet-to-be-specified savings.

Main budgetary measures (% of GDP)

Revenue	Expenditure
2011	
<ul style="list-style-type: none"> • Tax on the use of nuclear fuel (0.1%) • Increased contribution rate to the health-care insurance⁽¹⁾ 	<ul style="list-style-type: none"> • Abolition of pension allowance for the long-term unemployed (-0.1%) • Measures to curb the expenditure growth in the area of health-care⁽¹⁾
2012	
<ul style="list-style-type: none"> • n.a. 	<ul style="list-style-type: none"> • n.a.
2013	
<ul style="list-style-type: none"> • n.a. 	<ul style="list-style-type: none"> • Efficiency improvements in the Federal Employment Agency (-0.1%)
2014	
<ul style="list-style-type: none"> • n.a. 	<ul style="list-style-type: none"> • n.a.
2015	
<ul style="list-style-type: none"> • n.a. 	<ul style="list-style-type: none"> • n.a.

Note: The budgetary impact in the table is the impact reported in the Programme (SP or NRP), i.e. by the national authorities. A positive sign implies that revenue / expenditure increases as a consequence of the measure.

⁽¹⁾ The SP/NRP do not provide the budgetary impact.

¹⁸ The individual elements of the federal consolidation package were already presented in the report on the implementation of measures to reduce the excessive deficit submitted to the Commission in August 2010.

In structural terms¹⁹, after the initial structural improvement in 2011 of 0.2% the consolidation is concentrated in 2012 (0.6% of GDP) and continues in fairly equal steps of 0.25% on average over 2013-2015. Following the expected correction of the excessive deficit, the pace of adjustment towards the MTO implied by the programme falls below the 0.5% of GDP benchmark in 2013 and 2014. When assessed against the projected rate of medium-term potential output growth and taking into account discretionary revenue measures, expenditure projections seem to ensure an appropriate adjustment path towards the MTO. Given stable interest payments, the primary balance improves with the headline deficit, reaching a surplus of 2.5% of GDP in 2015.

The risks to the budgetary projections in the programme appear broadly balanced for 2011, but budgetary outcomes thereafter could be weaker than projected. In particular, some of the savings might not materialise as envisaged, since some measures are still subject to debate, e.g. nuclear fuel tax, reform of the military service. Thus, it might prove necessary to compensate for possible revenue shortfalls and missed expenditure savings. Moreover, some of the measures still need to be further specified, e.g. efficiency improvements in public administration and further expenditure savings (around 0.25% of GDP between 2013 and 2015). In addition, potential further financial market support measures cannot be excluded. Overall, the projected deficit reduction remains subject to some downside risks relating in particular to the implementation of the adjustment path in the outer years.

While the debt-to-GDP ratio ratcheted up by almost 10% in 2010, it is projected to embark on a downward trend as of 2011. The jump in 2010 was largely related to the fact that two troubled banks transferred impaired assets to their respective "bad-banks", which are classified under the government sector²⁰. The programme includes gradually winding-up "bad-banks" portfolios over the coming years. This, combined with continued consolidation as well as positive growth and inflation effects, is expected to bring the debt down to 75.5% of GDP by 2015. Divergences between the Commission services' debt projections and those in the programme stem mainly from the difference in debt-reducing stock-flow adjustments from 2011 onwards, related to a gradual winding-up of the "bad-banks" portfolio, as detailed information on the amounts involved was not available at the time of the Commission services' forecast. At the same time, in the Commission services' projections, the debt decrease is supported by more favourable developments in the primary balance and nominal GDP.

The debt ratio is thus on a decreasing path, but remains above the Treaty reference value over the entire programme horizon. In addition to the deficit-related risks, further debt increases could be induced by potential additional financial market support measures and slower progress with winding-up of the "bad-banks" portfolios.

Germany is to be at medium risk with regard to the long-term sustainability of public finances. The long-term cost of ageing is above the EU average. Moreover, the current budgetary position compounds the budgetary impact of population ageing on the sustainability gap. Based on the current fiscal position, debt would increase to 99.7% of GDP by 2020. However, the full implementation of the programme would be enough to put debt on a downward path by 2020. Ensuring sufficient primary surpluses over the medium term would improve the sustainability of public finances.

¹⁹ As recalculated by Commission Services in accordance with the commonly-agreed methodology.

²⁰ In line with the Eurostat guidance on accounting rules for financial defeasance structures (16 March 2011), the corresponding liabilities of "bad-banks" had a direct impact on the debt level.

The German fiscal framework has been considerably strengthened through the introduction of a constitutional budgetary rule, the creation of the Stability Council (*Stabilitätsrat*) and the early warning system to prevent budgetary distress²¹. In addition, in order to better accommodate the requirements of the budgetary rule, the federal budget is being drawn up using a top-down approach as of 2011. The new rule sets the ceiling for the federal structural deficit at 0.35% of GDP from 2016 onwards and the regional budgets of the *Länder* must be structurally balanced as of 2020. While the Federal government embarked on a consolidation course in 2011 to ensure a timely achievement of the constitutional ceiling, the rule still needs to be fully implemented at the *Länder* level. The newly-created Stability Council, composed of *Bund* and *Länder* finance ministers, monitors the federal and regional budgets and assesses annual budgetary reports and medium-term financial plans on the basis of a system of indicators and threshold levels. However, thresholds for the regional governments rely on *Länder* averages which can become less stringent due to the influence of individual cases, so that the early warning system would detect only extreme cases. Importantly, should the rule be breached, there is no ex post sanctioning mechanism apart from invitations to submit new financial plans and specify additional consolidation measures.

4.2.1.2. Financial sector

The recent financial crisis revealed weaknesses in the German financial system with regard to the regulation and the stability of some segments. Addressing these weaknesses would reduce risks for the public finances while supporting medium-term credit supply and economic growth. In particular, restructuring of some *Landesbanken*, whose structural problems were fully exposed in the downturn, as well as progressing swiftly with the outstanding regulatory questions would be crucial for sustaining financial stability, ensuring continuing access to financing and securing the government's fiscal room for manoeuvre. The positive effects that restructuring the *Landesbanken* could potentially have on the efficiency of financial intermediation and capital allocation would support productivity developments and economic growth. The unresolved issues in the sector and the related potential need for further state intervention remain an important risk to the ongoing consolidation efforts. Since June 2008, more than 20 state-aid decisions concerning the German banking sector have been taken. Except for the *Landesbank* Berlin and Helaba, every *Landesbank* has received state aid either directly or through its mother organisation. The aggregate figures for Germany include EUR 212 billion (8.5% of GDP) to guarantee banks' liabilities, EUR 40 billion (1.6% of GDP) in direct capital injections, and EUR 10 billion (0.4% of GDP) for the impaired-asset relief scheme.

Historically, the publically-owned *Landesbanken* promoted local development, served as banks of the *Länder* and as central institutions of the savings banks, balancing liquidity between savings banks, providing wholesale financing, participating in bigger loan projects, and bundling some non-core business functions such as training. However, the first two functions have diminished in importance with many *Landesbanken* increasingly competing

²¹ The former budget rule laid down in Art. 115 of the German Constitution suffered from several shortcomings (e.g. construction as an investment rule referring to gross, rather than net investment, vague definition of the exemption clause and the lack of sanction mechanism when violating the rule), which opened considerable discretionary leeway. For a detailed discussion see Baumann, E. and Kastrop, C. (2008), "A New Budget Rule for Germany", in *Fiscal Policy: Current Issues and Challenges*, Banca d'Italia, Research Department, Public Finance Workshop 2008; Eppendorfer, C. and Leib, K. (2008), "Germany: revisiting the budget rule", European Commission, ECFIN Country Focus, Vol. 5, Issue 12 and European Commission (2009), "Germany: Macro Fiscal Assessment. An Analysis of the December 2008 Update of the Stability Programme".

with large commercial banks. Until 2005, the *Landesbanken* business model relied heavily on state guarantees, enabling them to refinance themselves at a lower cost than their private competitors. After the phasing-out of the guarantees as from 2005, limited access to private households' deposits – the *Landesbanken* are not supposed to compete with the savings banks – and the resulting dependence on interbank financing made them especially vulnerable in times of liquidity distress. Moreover, with substantial liquidity reserves accumulated just before the withdrawal of the state guarantees, some *Landesbanken* invested heavily in structured fixed income products in a search of higher yields. However, given their relatively small size compared with global investment banks, underdeveloped risk management and limited market discipline in view of public ownership, they recorded unprecedented losses and had to seek public aid. The *Landesbanken* accounted for one third of German banks' write-downs of structured credit products between January 2007 and October 2009, despite representing only one fifth of the sector's total assets. Already before the crisis, public banks' loan portfolios were of poorer quality compared with their private counterparts.²²

The crisis also underlined the need for stronger financial market regulation and banking supervision, both in Germany and internationally. Also reflecting resource constraints, the focus of the supervisory authorities on quantitative rules-based monitoring has been too strong. Thus, a shift towards a principle-based approach including an assessment of macro-prudential risks is warranted, in line with international developments.

While the Programme acknowledges the core problem of the *Landesbanken* lacking a viable business model, no comprehensive reform strategy is put forward for the sector. After the crisis, most *Landesbanken* have not yet been able to repay the state's capital injections, even though the lion's share of toxic assets has been written off. Moreover a clear and sustainable business model for the troubled *Landesbanken* has still not emerged. Taking steps to restructure troubled *Landesbanken* with a view to ensuring access to finance and strengthening governance will be important. This would also contribute to a more efficient allocation of domestic savings as a means of underpinning domestic demand and investment. The Programme reports that initial consolidation steps in the sector are already underway – this area falls under the competence of the *Länder* – but is not yet complete and it does not present any forward-looking strategy for the sector. Restructuring options under debate in Germany include reducing the size (i.e. reducing them to their core business) and number (core functions for the savings bank could be provided by a smaller number of institutions) of *Landesbanken*, as well as reviewing the need for public ownership, with a view to strengthening governance and efficiency.

To address the outstanding regulatory issues, the German government has taken several steps in line with the relevant international agreements and EU regulations on rating agencies. As reported in the NRP, financial market regulation was further tightened by banning speculative short-selling practices, modifying restructuring procedures (Bank Restructuring Act), adjusting the compensation system of banks and insurance companies and enhancing the standards of consumer product information. Further efforts might be needed to revise the institutional set-up, and there are indications that, by international standards, there is scope for strengthening the independence of supervision²³.

Although there is no significant risk of a credit crunch, the unresolved issues pose a non-negligible risk to Germany's public finances and may limit the efficiency of the

²² See Ianotta, G., Nocera G. and Sironi A.: Ownership Structure, Risk and Performance in the European Banking Industry", *Journal of Banking and Finance*, Volume 31, 2007, pp. 2127-2149.

²³ See Quintyn, M., Ramirez S. and Taylor M. W.: The fear of freedom: Politicians and the independence and accountability of the financial sector supervisors. IMF Working Papers, No. 07/25.

transformation of savings into domestic investment. The German NRP recognises the challenges in the financial sector, but it does not provide a comprehensive roadmap for future action, focusing mainly on the initial steps already implemented in 2010.

4.2.2. Labour market policies

Going beyond the cyclical shortages that might emerge in the context of the current upswing, the negative effects of demographic changes²⁴ imply that having a suitably qualified labour supply in sufficient numbers will be a priority for Germany in the years to come. As recognised in the NRP, the innovative strength and structural competitiveness of the German economy depend to a large extent on well-trained, skilled workers; however, while labour supply shortages are forecast, particularly for medium and high-skilled workers. This underlines the importance of further measures to fully utilise the labour force potential by removing obstacles to labour market participation for particular groups (older workers, women, the low-skilled, persons with a migrant background and long-term unemployed) and further development of human capital. The NRP acknowledges the challenge of fostering employment growth and labour force participation in view of demographic developments. The national employment rate target was set at a rate of 77%, compared to an actual rate of 74.9% in 2010. The NRP lists some relevant policy initiatives, albeit from a largely backward-looking perspective. Major recent measures include the planned increase in the retirement age to 67 by 2029, efforts to improve the provision of child-care facilities and certain schemes aiming at better integration of persons with a migrant background into the labour market (e.g. through language support, vocational qualification and introduction of new legislation on recognition of professional qualifications obtained abroad). Overall, the NRP addresses some of the relevant issues for the German labour market but omits or insufficiently addresses some, notably the tax wedge, child-care, vocational training qualifications and weaknesses in the education system.

4.2.2.1. Making work more attractive

A major gap relating to labour market challenges is the fact that the NRP does not present any specific plans for addressing the high tax wedge²⁵. In spite of an already high overall employment rate, the tax wedge is an obstacle to the full utilisation of the economy's labour potential and impedes wage increases from being translated to a larger extent into higher disposable incomes and domestic demand. The tax wedge is particularly high for low-wage earners²⁶, thus hindering further increases in the currently low employment rate of low-skilled workers. A particular problem in the German case is the high marginal tax rate of second earners resulting from the joint taxation of couples.²⁷ Unsurprisingly, there is a relatively high

²⁴ The growth rate of the working-age population turned negative in 2009 and the active labour force is projected to shrink from 45 million in 2010 to 41 million in 2020. The negative effects of ageing compounded by less favourable projected migration flows imply a stronger decline in working age population (15-64 years) in Germany than in other Member States. In Eurostat's projections, the projected decline between 2010 and 2025 is 3% in Germany, e.g. 2% in France and 5% in the EU. Taking into account migration, the projected decrease is much more pronounced for Germany (-4%) than France (0%) or the EU (-2%) (by 2060: -33% for Germany, 0% for France, -13% for the EU).

²⁵ The tax wedge is defined as income tax plus employee and employer social security contributions minus cash transfers as a percentage of earnings. For a single earner with average wage, this was: 49.1% in 2010, third highest in the OECD (average 34.9%).

²⁶ E.g. single earner with 67% of average wage: 44.9% in 2010, third highest in the OECD (average 31.3%).

²⁷ For example, for a couple in which the primary earner earns 66% of the average earnings and the secondary earner moves from 33% to 66% of the average earnings (via an increase in hours or in the wage per hour), the marginal tax rate (income taxes and social contribution) is 48.6%, the fourth highest rate in the EU.

proportion part-time workers, especially among women, while hours worked in part-time employment are typically also low.

Shifting from the joint taxation of couples to a system of individual taxation in order to increase work incentives for second earners could contribute to higher female employment. Moreover, adjusting the tax rate structure in the personal income tax system to offset tax increases resulting from inflation could be considered. Importantly, lower taxes on labour need to be offset by expenditure restraint unless other sources of revenue can be tapped. In this context, critically reviewing the range of goods to which the reduced VAT rate is applied with a view of increasing VAT revenues might be useful - according to the Stability Programme, a review of the reduced VAT rates is already on the agenda.

In order to facilitate full-time labour force participation of women²⁸ (and men), increasing the availability of fulltime childcare facilities with adequately qualified staff is also important, in particular in western parts of the country, while there is also unmet demand for out-of-school-care facilities for older children. Although the government has rightly identified the challenge of increasing the supply of adequate childcare facilities, it is important that its objectives in this field are reached and that the legal right to a place in a childcare facility is enforceable. The comparatively short and inflexible opening hours of childcare facilities are of concern given traditionally short schooldays.

Recognising that attracting skilled immigrants in line with the needs of the German labour market could help reduce possible skill shortages, the NRP mentions plans to facilitate their labour market integration. However, further measures going beyond the announced law regarding the recognition of professional qualifications obtained abroad may be required.

4.2.2.2. Improve education and training

As acknowledged by the NRP, further reforms to improve equitable access to quality education and training systems will be key to ensure adequately-skilled labour supply. The long-term expansion of tertiary education has been slower than in other Member States. Among older cohorts (older than 40 years), the share of people with tertiary education in the population is still higher than the EU average. However, tertiary educational attainment is relatively lower for younger cohorts. Combined with the demographic development, this could contribute to increasing shortages of high-skilled labour in the medium and long terms, particularly in maths, science and technology subjects (MST)²⁹, with the biggest needs anticipated in engineering graduates. The initiatives mentioned in the NRP regarding tertiary education (Excellence Initiative, Higher Education Pact, increases in student grants and scholarships) are welcome, but the magnitude of the challenge calls for further efforts. Even though Germany traditionally relies heavily on its very advanced system of vocational education and training (VET, *Berufsausbildung*, which is also the reason why it includes ISCED level 4 qualifications in its Europe 2020 tertiary attainment target³⁰), this system cannot fully substitute for tertiary education (ISCED 5 and 6).

²⁸ In 2009, the share of women employees working part-time in Germany was 45.3% compared to 31.5% in the EU. The employment rate in full-time equivalents stood at 50.7% in 2009. The average number of hours worked per week by part-time workers in Germany amounts to only 18.5 hours which is 1.5 hours below the EU-average.

²⁹ Already in 2008 a shortage of 330,000 graduates by 2013, half of them in MST, was anticipated by the government and, more recently, industry claimed that a record deficit of engineers had emerged in 2011.

³⁰ ISCED 4 relates to post-secondary education of a duration of less than 2 years (in 2009 amounting to 11.4%); ISCED 5 and 6 attainment of 30-34 year olds in 2009: 29.4%; ISCED 4-6 in 2009 in Germany: 40.8%.

While the incidence of early school leaving in Germany is below the EU average³¹, it is diminishing rather slowly. Socially disadvantaged groups, including young people with a migrant background, face a much higher risk of early drop-out from education and training than their peers and their attainment rates tend to remain low, also in view of the traditionally short school days. Although declining, there are also still large differences in skills levels (as measured for example by the OECD's PISA studies) between pupils and the link between achievement and socio-demographic background remains strong.

The NRP briefly lists some *Länder* initiatives regarding primary and secondary education but further measures to tackle systematically the economic and social consequences of low educational attainment and higher drop-out risks of certain societal groups might be necessary. Reforms that improve the lower levels of the education system, starting with better access to quality pre-school education and care, also benefit upper secondary³² and tertiary education as well as vocational training outcomes. The share of low achievers and drop outs at school level could be further reduced, e.g. through widening early language learning, better individual support for pupils at risk (including guidance, tutoring, social workers), wider provision of all-day schools, and broad-scale measures to effectively facilitate transition from school to professional training.

Assessed against the status quo, Germany's targets in the field of education (see table 1 above) are not very ambitious.

4.2.2.3. Getting the unemployed back to work

In view of likely labour supply developments in Germany, the persistent gaps in labour market outcomes are not sustainable. The unemployment rate is especially high for *low-skilled workers*³³, while their participation rate in life-long learning (LLL) remains low³⁴. Persons with a migrant background (around one fifth of the population) are twice as likely to be affected by unemployment for several reasons, low qualification levels, an education system lacking inclusiveness, difficulties in the recognition of professional qualifications and poor German language skills. Given the emerging shortages of skilled labour, it will be important to increase the participation rate of low-skilled workers in life-long learning, including training leading to vocational training qualifications and to raise attainment levels in particular for persons with a migrant background. This issue is also closely related to the need to improve the initial education system, which reinforces inequalities between young people of different social backgrounds, including those with a migrant background and disabled people. The measures in the NRP regarding education make a partial contribution to addressing these issues.

Furthermore, while long-term unemployment has decreased over the past few years as a result of the 'Hartz' reforms increasing incentives to work for the long-term unemployed, Germany faces increasing difficulties in integrating a core group of 'persistent long-term unemployed'. Additional measures to support their reintegration into the labour market would reduce the risk of skill erosion through inactivity. The NRP underlines the importance of further reducing the share of the long-term unemployed in Germany but the potential of the proposed measures to improve the work incentives for their long-term unemployed seems to be limited. Against the backdrop of the considerable budget cuts due to fiscal consolidation efforts and

³¹ 11.1% vs. 14.4% (EU) in 2009.

³² Germany has a relatively low level of upper secondary attainment (20-24 years) (DE: 73.7%; EU: 78.6%) and the level of tertiary attainment (30-34 years) is below the EU average (DE: 29.4%, EU: 32.3%).

³³ 2009: 15.5% vs. 12.8% for the EU.

³⁴ 2.9% against an EU average of 3.9% in 2009.

the 2011 *Hartz IV*-compromise, the design of cost-effective and efficient measures and placement services as well as better targeting of the instruments to the market needs could be carefully considered.

4.2.2.4. Combat poverty and promote social inclusion

Over the last decade the percentage of the population at risk of poverty or exclusion has increased to reach 20%. The NRP thus rightly identifies challenges in relation to poverty: long-term unemployment, intergenerational transmission of poverty, old age poverty and the integration of people with a migration background into the society and the labour market. The national poverty target focuses on long-term unemployment (330,000 persons, implying an estimated reduction by 660 000 in the number of the people living in jobless households). However, this represents a very small fraction of the 16.2 million people living at risk of poverty or exclusion. Despite the growing number of people classified as being in in-work-poverty, this is not identified as a challenge.³⁵ The NRP lists a number of measures that could help reduce unemployment among the groups at risk of poverty and social exclusion. These include: (1) increasing the labour market participation of women, in particular women with children and single parents; (2) integrating disadvantaged people, in particular long-term unemployed, people with a migration background or disabled people into the labour market. Finally, the NRP reports on a (quantitatively limited) package of measures to improve the access of children of poor families to educational and cultural services. Take-up of this package should be monitored.³⁶

4.2.3. Growth-enhancing structural measures

Given the declining trend in German productivity growth in conjunction with the demographic trends discussed above, structural measures supporting productivity developments are of key importance in underpinning the economy's medium-term growth potential. In particular, reforms to further improve the economy's regulatory framework would facilitate competition and enhance efficiency, potentially translating into higher investment and productivity growth.

While the service sector's contribution to GDP growth may seem low by international standard, this reflects the traditional strength of the German manufacturing sector. Though progress has been made through the implementation of the Services Directive, enhancing competition in the services sector by further removing regulatory barriers, including obstacles to market entry and exit could help to raise the sector's relatively low productivity and contribute to a further broadening of domestic demand. Important measures to promote competition in the service sector include the improvement of the regulatory framework for professional services, crafts and network industries, notably railways.

At the same time, measures aimed at further strengthening Germany's R&D performance also have a major role to play in supporting productivity growth. Finally, the implementation of the German "Energy Concept" could also underpin domestic demand by stimulating investment in networks, energy efficiency and cost-efficient renewable energy as well as by enhancing competition in energy markets.

4.2.3.1. The business and consumer environment

³⁵ The risk of poverty and social exclusion for workers (9.0%) is below the EU average (12.3%). However, the share of persons earning less than 66% of the median wage (19.6%) is above the EU average (17.2%).

³⁶ EU average: 23.1% in 2009.

Recently the implementation of the Services Directive some important steps being taken to reduce excessive regulatory restrictions on professional services and crafts, but the license and permit system for certain professional services (especially engineers, architects, pharmacists, accountants and lawyers) and crafts remains more cumbersome than in many other countries. Moreover, regulations on prices and fees, on professional co-operations, on advertising, as well as rules for compulsory chamber memberships could be further eased, while maintaining the standards for professional qualification. However, the NRP does not announce any measures in this respect.

At the same time, competition in network industries is still hampered as enterprises in these markets are still highly vertically integrated. The Federal Network Agency already has been established and a first functional unbundling of the network management from the remaining activities in the gas and electricity sector has already been implemented. An ambitious transposition of the third EU energy package would be a cornerstone for further enhancing competition in German energy markets, in particular by ensuring an effective independence of energy production and transmission activities, as well as increasing capacity and improving accessibility of cross-border interconnections.

Furthermore, competition in the railway sector is still impeded. The planned partial opening of long-distance bus connections, as stated in the NRP, may enhance competition in passenger transport. However, the effective unbundling of infrastructure management from transport services, as prerequisite for a competitive market, is still not completed and subject to an on-going infringement procedure. Additional measures that would foster competition in the railway sector concern the strengthening of the Federal Network Agency's supervisory role, the abolition of cross-subsidisation between the network operator and rail service providers as well as the full opening of sales and ticketing infrastructure.

In recent years, Germany has made considerable progress in simplifying the regulatory framework and the reduction of administrative burden, in particular regarding the reporting obligations in the business sector. Despite a number of initiatives highlighted in the NRP (e.g. the "Bureaucracy Reduction and Better Regulation" programme or the proposed tax simplification act), further efforts and additional measures will be necessary in order to meet the target of 25% reduction in the net cost of reporting obligations by the end of 2012 and to further reduce compliance costs.

4.2.3.2. Research and Innovation

Germany's R&D performance raises concerns for its long-term competitiveness. While R&D intensity has grown above the EU average, approaching already the national and European target of 3% of GDP, Germany is lagging behind the R&D targets set by comparable research-oriented economies such as e.g. Japan and South Korea. In this context, the availability of a sufficient number of well-trained researchers will increasingly constitute a bottleneck for the growth of Germany's science base. Furthermore, access to risk capital to finance innovation is still hampered by an underdeveloped venture capital market, jeopardising Germany's comparative advantage in knowledge and research-driven economic growth in the long term. To increase innovation dynamics, Germany plans to invest an additional €12bn in education and research up to 2013. In the "High-Tech-Strategy", the priority sectors that will receive the government's R&D support are: health, nutrition, climate and energy (e.g. fostering the development of electric cars with the aim of putting one million electric cars on Germany's roads by 2020) as well as mobility and communication. To

reinforce the impact of this strategy using public procurement to stimulate and steer demand for innovative products in the sectors selected could be considered.

4.2.3.3. Energy and Climate change policy

Germany has recently announced far-reaching changes in its energy policy. As the details of the changes are currently being worked out, the assessment of Germany's energy and climate change policy is based on the information provided in the National Reform Programme and does not take into account the changes envisaged.

Germany seems well prepared to achieve the national targets on renewable energy. However, challenges lie in improving the cost-effectiveness of renewable energy supply and its integration into network infrastructure. Germany has set a national energy efficiency target of increasing overall energy productivity by an average 2.1% annually from 2008 until 2020, which would significantly contribute to reaching the overall European energy efficiency target. However, the impact of the target on primary energy consumption could be clarified further. In terms of implementing the energy efficiency target, Germany relies on the set of instruments put forward in the national "Energy Concept" of September 2010. In particular, energy performance could be further improved by increasing the rate of renovation of the building stock through appropriate financial incentives and standards, introducing energy efficiency as a key criterion for public spending, promoting energy audits and energy management systems in industry and strengthening the role of consumers by improved information.

The implementation of the German government's "Energy Concept" provides a solid basis for achieving Germany's energy and climate targets and should effectively contribute to increasing energy efficiency, raising the share of renewable energy and better integrating the German market into European energy markets. However, the upcoming review of the Renewable Energy Act could be an occasion to improve its long-term cost-effectiveness and ability to respond to technological progress, to review in particular the appropriateness of the feed-in rates for photovoltaic and bio-energy and to consider more efficient instruments for close-to-competitive technologies that are compatible with a competitive and well-integrated internal electricity market. Moreover, network infrastructure needs to be upgraded for the integration of renewables and licensing procedures may be improved in order to increase network capacity.

The announced changes in German energy policy underline the importance of increasing energy efficiency, upgrading electricity grids, developing cost-effective renewable energies and ensuring a competitive national and an integrated European electricity market.

The national reform programme does not contain an assessment of the sufficiency of the existing and proposed emissions reductions measures to reach the 2020 target nor operational targets. These would contribute to an efficient monitoring of the progress made towards the 2020 target. Nevertheless, the recent evolution of green house gas emissions does not appear in contradiction with the 2020 national target defined at the European level (-14% compared to 2005 levels). But as emissions tend to be less during the economic crisis, progress in the course of the recovery should be monitored closely. In this context additional emissions reduction measures to take advantage of co-benefits (energy savings, reduction of atmospheric pollution, increased security of energy supply, green jobs etc.) would be beneficial.

5. SUMMARY

Germany is expected to correct its excessive deficit already in 2011 – two years ahead of the deadline established by the Council. The medium-term objective of -0.5% of GDP, set out in the Stability Programme update, will be close to being achieved in 2013 and fully achieved in 2014. The risks appear broadly balanced for 2011, but budgetary outcomes thereafter could be weaker than expected. In particular, some savings might not materialise as envisaged, since some measures are still subject to debate (e.g. nuclear fuel tax, financial sector taxation or reform of the military service) and others still remain to be specified (e.g. efficiency improvements in public administration). Moreover, the need for further financial market support measures cannot be excluded. Thus, it might prove necessary to compensate for possible revenue shortfalls and missed expenditure savings. Since the recent reform of the health-care system introduced measures to curb spending increases mainly in 2011 and 2012, further steps to enhance the efficiency of public spending on health-care, as well as long-term care, would smooth the way to consolidation. At the same time, maintaining a largely growth-oriented consolidation course would help to strengthen the long-term growth potential. Moreover, while the German fiscal framework has been considerably strengthened by a constitutional budgetary rule, the creation of the Stability Council and the early warning system to prevent budgetary distress, this rule is still not fully implemented at the *Länder* level and further strengthening of the associated monitoring and sanctioning mechanism would enhance the overall credibility of Germany's public finances.

The policy measures stated in the NRP are in general consistent with the challenges previously identified and with the national targets derived from the Europe 2020 headline targets. They are likely to contribute positively to strengthening productivity and potential output growth and to enhancing the competitiveness of the German economy. However, given the significance of the medium-term challenges ahead for the German economy, despite its current good performance, the reform agenda envisaged in the NRP lacks ambition. Several important aspects remain unaddressed or are only touched upon. In particular, fully utilising the economy's labour force potential is an area where further progress is both necessary and potentially highly beneficial to the German economy in view of negative demographic effects on labour supply. Incentives to work are influenced reduced by the high tax wedge as well as by the joint income taxation of couples while the lack of sufficient of childcare facilities influences especially female labour supply. Given Germany's comparative advantage in goods that require medium and high-skilled labour input and in view of projected skill-shortages, access to and the quality of education at all levels are of key importance. Further steps to foster competition in the service sector, in particular in professional services and the railway sector, would strengthen domestic demand and therefore contribute to rebalancing German economic growth. The announced far-reaching changes in German energy policy underline the importance of increasing energy efficiency, upgrading electricity grids, developing cost-effective renewable energies and ensuring a competitive national and an integrated European electricity market. Further work is warranted in the banking sector with regard to troubled Landesbanken and strengthening the regulatory and supervisory framework of the sector. Progress in this area would not only help preserve financial stability but could also contribute to a more efficient allocation of domestic savings as a means of underpinning domestic demand and investment.

STATISTICAL ANNEX

Table I. Macro economic indicators

	1995- 1999	2000- 2004	2005- 2008	2009	2010	2011	2012
Core indicators							
GDP growth rate	1.7	1.1	1.9	-4.7	3.6	2.6	1.9
Output gap ¹	0.1	-0.1	0.2	-4.3	-2.0	-1.1	-0.8
HICP (annual % change)	1.0	1.5	2.2	0.2	1.2	2.6	2.0
Domestic demand (annual % change) ²	1.6	0.0	1.2	-1.9	2.5	2.3	2.0
Unemployment rate (% of labour force) ³	8.7	8.5	9.4	7.8	7.1	6.4	6.0
Gross fixed capital formation (% of GDP)	21.3	19.0	18.3	17.6	17.9	18.5	18.9
Gross national saving (% of GDP)	20.7	20.1	24.4	21.5	22.6	22.9	23.2
General Government (% of GDP)							
Net lending (+) or net borrowing (-)	-2.6	-2.6	-1.1	-3.0	-3.3	-2.0	-1.2
Gross debt	59.0	61.7	66.7	73.5	83.2	82.4	81.1
Net financial assets	-33.2	-40.2	-45.8	-48.5	n.a	n.a	n.a
Total revenue	45.8	44.7	43.7	44.5	43.3	43.3	43.2
Total expenditure	48.4	47.3	44.9	47.5	46.6	45.3	44.3
<i>of which: Interest</i>	3.4	3.0	2.8	2.6	2.4	2.4	2.4
Corporations (% of GDP)							
Net lending (+) or net borrowing (-)	-0.3	-0.8	1.8	1.7	2.4	1.1	0.5
Net financial assets; non-financial corporations	-53.1	-61.6	-64.1	-59.3	n.a	n.a	n.a
Net financial assets; financial corporations	0.4	1.5	7.3	6.7	n.a	n.a	n.a
Gross capital formation	11.3	10.5	10.3	8.6	9.5	10.1	10.6
Gross operating surplus	20.7	21.9	24.5	22.4	23.8	23.6	23.8
Households and NPISH (% of GDP)							
Net lending (+) or net borrowing (-)	3.3	5.0	5.9	6.3	6.0	5.6	5.3
Net financial assets	86.7	100.2	120.1	131.0	n.a	n.a	n.a
Gross wages and salaries	42.8	42.2	40.0	41.4	40.9	40.9	40.8
Net property income	11.9	13.2	15.2	15.0	14.5	14.8	15.2
Current transfers received	23.0	23.8	22.5	23.5	22.8	22.1	21.5
Gross saving	11.1	11.0	11.6	12.2	12.1	11.9	11.7
Rest of the world (% of GDP)							
Net lending (+) or net borrowing (-)	-0.9	1.5	6.6	5.0	5.1	4.7	4.6
Net financial assets	-0.2	1.7	-15.0	-26.4	n.a	n.a	n.a
Net exports of goods and services	1.0	3.2	6.1	4.9	5.2	4.8	4.7
Net primary income from the rest of the world	-0.8	-0.6	1.7	1.4	1.3	1.3	1.3
Net capital transactions	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Tradable sector	40.0	39.6	39.8	36.1	37.5	n.a	n.a
Non tradable sector	50.4	50.5	50.1	53.2	52.2	n.a	n.a
<i>of which: Building and construction sector</i>	5.4	4.2	3.6	3.8	3.7	n.a	n.a
Real effective exchange rate (index, 2000=100)	114.8	100.7	97.3	99.2	95.2	95.8	96.3
Terms of trade goods and services (index, 2000=100)	104.7	101.5	100.1	103.1	100.8	99.0	99.0
Market performance of exports (index, 2000=100)	99.7	104.9	114.0	115.8	120.5	122.8	123.6
Notes:							
¹ The output gap constitutes the gap between the actual and potential gross domestic product at 2000 market prices.							
² The indicator on domestic demand includes stocks.							
³ Unemployed persons are all persons who were not employed, had actively sought work and were ready to begin working immediately or within two weeks. The labour force is the total number of people employed and unemployed. The unemployment rate covers the age group 15-74.							
Source:							
<i>Commission services' spring 2011 forecast</i>							

Table II. Comparison of macroeconomic developments and forecasts

	2010		2011		2012		2013	2014	2015
	COM	SP	COM	SP	COM	SP	SP	SP	SP
Real GDP (% change)	3.6	3.6	2.6	2.3	1.9	1.8	1½	1½	1½
Private consumption (% change)	0.4	0.4	1.2	1.6	1.5	1.5	1	1	1
Gross fixed capital formation (% change)	6.0	6.0	6.0	4.3	4.8	3.7	2	2	2
Exports of goods and services (% change)	14.1	14.1	7.6	6.5	6.5	6.5	4	4	4
Imports of goods and services (% change)	12.6	12.6	7.5	6.4	7.2	6.9	4	4	4
<i>Contributions to real GDP growth:</i>									
- Final domestic demand	1.8	1.8	2.1	1.9	1.9	1.8	1½	1½	1½
- Change in inventories	0.6	0.6	0.0	0.0	0.0	-0.1	0	0	0
- Net exports	1.2	1.3	0.5	0.4	0.0	0.1	0	0	0
Output gap ¹	-2.0	-2.0	-1.1	-1.3	-0.8	-0.8	-0.5	-0.2	0.2
Employment (% change)	0.5	0.5	0.9	0.8	0.5	0.4	0	0	0
Unemployment rate (%)	7.1	6.8	6.4	6.0	6.0	5.5	5	5	5
Labour productivity (% change)	3.1	3.1	1.6	1.5	1.4	1.4	1½	1½	1½
HICP inflation (%)	1.2	n.a.	2.6	n.a.	2.0	n.a.	n.a.	n.a.	n.a.
GDP deflator (% change)	0.6	0.6	1.0	1.0	1.5	1.0	1¼	1¼	1¼
Comp. of employees (per head, % change)	2.2	2.2	2.7	2.3	2.9	2.1	2½	2½	2½
Net lending/borrowing vis-à-vis the rest of the world (% of GDP)	5.1	5.1	4.7	4.7	4.6	4.8	6.0	6.0	6.0
Note:									
¹ In percent of potential GDP, with potential GDP growth according to the programme as recalculated by Commission services.									
Source :									
Commission services' spring 2011 forecasts (COM); Stability programme (SP).									

Table III. Composition of the budgetary adjustment

(% of GDP)	2010	2011		2012		2013	2014	2015	Change: 2010-2015
	COM	COM	SP	COM	SP	SP	SP	SP	SP
Revenue	43.3	43.3	43	43.2	43	43	42½	42½	-0.6
<i>of which:</i>									
- Taxes on production and imports	12.4	12.6	12½	12.6	12½	12½	12	12	-0.3
- Current taxes on income, wealth, etc.	10.3	10.4	10½	10.4	11	11	11	11	0.9
- Social contributions	16.8	16.8	16½	16.6	16½	16½	16	16	-0.7
- Other (residual)	3.7	3.6	3.5	3.5	3.5	3.4	3.3	3.2	-0.5
Expenditure	46.6	45.3	45½	44.3	44½	44	43½	43	-3.6
<i>of which:</i>									
- Primary expenditure	44.2	43.0	43.0	41.9	42.2	41.4	40.6	40.2	-4.0
<i>of which:</i>									
Compensation of employees and intermediate consumption	11.9	11.7	11½	11.5	11½	11½	11	11	-1.0
Social payments	26.2	25.5	25½	25.0	25	25	24½	24½	-1.8
Subsidies	1.3	1.3	1½	1.2	1	1	1	1	-0.2
Gross fixed capital formation	1.6	1.5	1½	1.4	1½	1	1	1	-0.3
Other (residual)	3.2	2.9	3	2.8	3	3	2½	2½	-0.6
- Interest expenditure	2.4	2.4	2½	2.4	2½	2½	2½	2½	0.3
General government balance (GGB)	-3.3	-2.0	-2½	-1.2	-1½	-1	-½	-½	3.0
Primary balance	-0.9	0.4	-0	1.2	1	1½	2	2½	3.3
One-off and other temporary measures	-0.3	0.0	-0	0.0	0	0	0	0	0.3
GGB excl. one-offs	-3.0	-2.0	-2.3	-1.2	-1.5	-1.1	-0.6	-0.3	2.7
Output gap ²	-2.0	-1.1	-1.3	-0.8	-0.8	-0.5	-0.2	0.2	2.2
Cyclically-adjusted balance ²	-2.2	-1.4	-1.9	-0.8	-1.1	-0.8	-0.5	-0.3	1.9
Structural balance³	-1.9	-1.4	-1.7	-0.8	-1.1	-0.8	-0.5	-0.3	1.6
<i>Change in structural balance</i>		0.5	0.2	0.7	0.6	0.2	0.3	0.2	
Structural primary balance ³	0.5	0.9	0.7	1.6	1.4	1.8	2.2	2.4	1.9
<i>Change in structural primary balance</i>		0.5	0.3	0.7	0.7	0.4	0.4	0.2	
Notes:									
¹ On a no-policy-change basis.									
² Output gap (in % of potential GDP) and cyclically-adjusted balance according to the programme as recalculated by Commission services on the basis of the information in the programme.									
³ Structural (primary) balance = cyclically-adjusted (primary) balance excluding one-off and other temporary measures.									
Source :									
Stability programme (SP); Commission services' spring 2011 forecasts (COM); Commission services' calculations									

Table IV. Debt dynamics

(% of GDP)	average 2005-09	2010	2011		2012		2013	2014	2015
			COM	SP	COM	SP	SP	SP	SP
Gross debt ratio¹	68.0	83.2	82.4	82	81.1	81	79½	77½	75½
Change in the ratio	1.5	9.8	-0.9	-1.4	-1.3	-1.0	-1.5	-1.9	-2.1
<i>Contributions²:</i>									
1. Primary balance	-1.2	0.9	-0.4	0.1	-1.2	-1.0	-1.5	-2.1	-2.5
2. “Snow-ball” effect	1.7	-0.6	-0.5	-0.2	-0.4	0.2	0.3	0.5	0.5
<i>Of which:</i>									
Interest expenditure	2.7	2.4	2.4	2.4	2.4	2.4	2.6	2.7	2.7
Growth effect	-0.4	-2.6	-2.1	-1.8	-1.5	-1.5	-1.2	-1.2	-1.2
Inflation effect	-0.7	-0.4	-0.8	-0.8	-1.2	-0.8	-1.0	-1.0	-1.0
3. Stock-flow adjustment	1.1	9.5	0.0	-1.3	0.3	-0.2	-0.3	-0.3	-0.2
<i>Of which:</i>									
Cash/accruals diff.	-0.2	-0.2							
Acc. financial assets	1.3	9.6							
<i>Privatisation</i>	n.a.	n.a.							
Val. effect & residual	0.0	0.0							

Notes:¹End of period.²The snow-ball effect captures the impact of interest expenditure on accumulated debt, as well as the impact of real GDP growth and inflation on the debt ratio (through the denominator). The stock-flow adjustment includes differences in cash and accrual accounting, accumulation of financial assets and valuation and other residual effects.**Source :**

Stability programme (SP); Commission services' spring 2011 forecasts (COM); Commission services' calculations.

Table V. Long-term sustainability indicators

Germany	Baseline scenario (2010)			Programme scenario		
	S1	S2		S1	S2	
Value	4,5	5,0		2,2	2,8	
of which:						
Initial budgetary position (IBP)	1,4	1,4		-0,7	-0,8	
Debt requirement in 2060 (DR)	0,4	-		0,2	-	
Long-term change in the primary balance (LTC)	2,7	3,6		2,7	3,6	
	2010	2015	2020	2010	2015	2020
Debt as % of GDP	83,2	87,7	99,7	83,2	75,3	71,2

Note: The 'baseline' scenario (2010) depicts the sustainability gap under the assumption that the 2010 budgetary position remains unchanged over the medium-term (until the end of the period covered by the programme). The 'programme' scenario depicts the sustainability gap under the assumption that the budgetary plans of the programme are fully implemented.

Figure. Medium-term debt projection

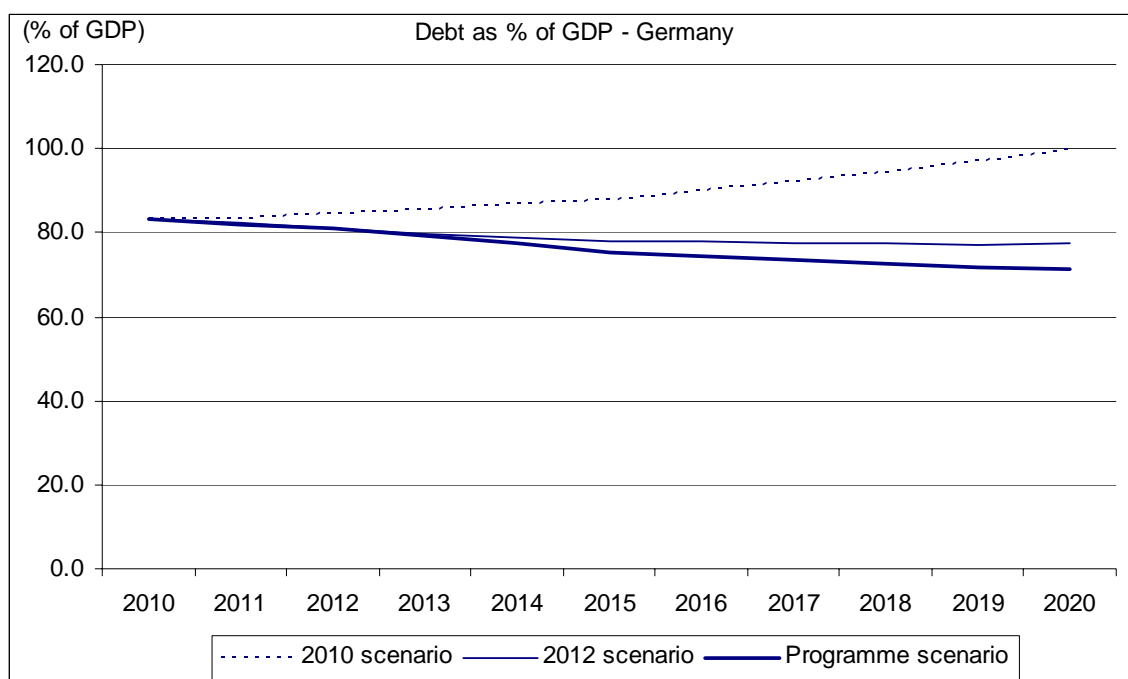


Table VI. Financial market indicators

	2006	2007	2008	2009	2010
Total assets of the banking sector (% of GDP)	303.4	304.1	313.0	319.4	302.8
Share of assets of the five largest banks (% of total assets)	22.0	22.0	22.7	25.0	...
Foreign ownership of banking system (% of total assets)	11.1	11.1	11.5	10.8	...
Financial soundness indicators:					
- non-performing loans (% of total loans)	3.4	2.6	2.8	3.3	...
- capital adequacy ratio (%) ¹⁾	12.5	12.9	13.6	14.8	16.1
- profitability - return on equity (%) ²⁾	9.4	6.6	-7.7
Private credit growth (annual % change)	2.3	1.3	5.1	2.1	-0.6
Residential property prices (y-o-y % change)	0.1	1.0	0.6	0.6	2.3
Exposure to countries receiving/repaying official financial assistance (% of GDP) ³⁾	8.4	9.9	10.0	8.9	6.6
Private debt (% of GDP)	104.6	104.1	107.0	110.2	105.8
Gross external debt (% of GDP)					
- Public	31.0	30.8	36.2	36.8	42.1
- Private	34.1	34.6	40.0	39.6	42.0
Long term interest rates spread versus Bund (basis points)*	0.0	0.0	0.0	0.0	0.0
Credit default swap spreads for sovereign securities (5-year)*	21.7	37.5	39.8

Notes:

¹⁾ The capital adequacy ratio is defined as total capital divided by risk weighted assets.

²⁾ Net income to equity ratio.

³⁾ Covered countries are IE, EL, PT, RO, LV and HU.

* Measured in basis points.

Source:

Bank for International Settlements and Eurostat (exposure to macro-financially vulnerable countries), IMF (financial soundness indicators), Commission services (long-term interest rates), World Bank (gross external debt), Eurostat (residential property prices) and ECB (all other indicators).

Table VII. Labour market and social indicators

Labour market indicators	2005	2006	2007	2008	2009	2010
Employment rate (% of population aged 20 - 64)	69.9	71.6	73.4	74.6	74.8	74.9
Employment growth (% change from previous year)	-0.1	0.6	1.7	1.4	0.0	0.5
Employment rate of women (% of female population aged 20 - 64)	64.2	65.8	67.5	69.0	69.8	69.6
Employment rate of men (% of male population aged 20 - 64)	75.6	77.2	79.2	80.2	79.7	80.1
Employment rate of older workers (% of population aged 55 - 64)	45.4	48.4	51.5	53.8	56.2	57.7
Part-time employment (% of total employment)	24.0	25.8	26.0	25.9	26.1	26.2
Fixed term employment (% of employees with a fixed term contract)	14.1	14.5	14.6	14.7	14.5	14.7
Unemployment rate ¹ (% of labour force)	11.2	10.3	8.7	7.5	7.8	7.1
Long-term unemployment ² (% of labour force)	5.7	5.5	4.7	3.8	3.4	3.2
Youth unemployment rate (% of youth labour force aged 15-24)	15.5	13.8	11.9	10.6	11.2	9.9
Youth NEET ³ rate (% of population aged 15-24)	10.7	9.5	8.8	8.3	8.7	:
Early leavers from education and training (% of pop. 18-24 with at most lower sec. educ. and not in further education or training)	13.5	13.6	12.5	11.8	11.1	:
Tertiary educational attainment (% of population 30-34 having successfully completed tertiary education)	26.0	25.9	26.5	27.7	29.4	:
Labour productivity per person employed (annual % change)	0.9	2.7	1.0	-0.4	-4.7	3.1
Hours worked per person employed (annual % change)	-0.5	-0.3	0.0	-0.2	-2.5	2.0
Labour productivity per hour worked (annual % change; constant prices)	1.4	3.1	1.0	-0.2	-2.2	1.0
Compensation per employee (annual % change; constant prices)	-0.8	0.7	-0.9	0.9	-1.2	1.6
Nominal unit labour cost growth (annual % change)	-1.0	-1.6	-0.1	2.4	5.2	-0.9
Real unit labour cost growth (annual % change)	-1.6	-2.0	-1.9	1.3	3.7	-1.4

Notes:

¹ According to ILO definition, age group 15-74)

² Share of persons in the labour force who have been unemployed for at least 12 months.

³ NEET are persons that are neither in employment nor in any education or training.

Sources:

Commission services (EU Labour Force Survey and European National Accounts)

Table VII. Labour market and social indicators (continued)

Expenditure on social protection benefits (% of GDP)	2004	2005	2006	2007	2008
Sickness/Health care	8.08	8.11	7.98	7.93	8.12
Invalidity	2.23	2.21	2.12	2.04	2.08
Old age and survivors	12.38	12.32	11.96	11.53	11.47
Family/Children	3.25	3.09	2.87	2.80	2.82
Unemployment	2.25	2.09	1.84	1.55	1.44
Housing and Social exclusion n.e.c.	0.54	0.78	0.82	0.78	0.74
Total	28.7	28.6	27.6	26.6	26.7
of which: Means tested benefits	3.18	3.48	3.46	3.28	3.18
Social inclusion indicators	2005	2006	2007	2008	2009
Risk-of-poverty or exclusion ¹ (% of total population)	18.4	20.2	20.6	20.1	20.0
Risk-of-poverty or exclusion of children (% of people aged 0-17)	17.9	20.9	19.7	20.1	20.4
Risk-of-poverty or exclusion of elderly (% of people aged 65+)	14.5	13.5	16.8	15.5	16.0
At-Risk-of-Poverty rate ² (% of total population)	12.2	12.5	15.2	15.2	15.5
Value of relative poverty threshold (single HH per year) - in PPS	9396	9096	10392	10800	10776
Severe Material Deprivation ³ (% of total population)	4.6	5.1	4.8	5.5	5.4
Share of people living in low work intensity households ⁴ (% of people aged 0-59 not student)	11.9	13.5	11.4	11.6	10.8
In-work at-risk-of poverty rate (% of persons employed)	4.8	5.5	7.4	7.1	6.8
Notes:					
¹ People at-risk-of poverty or social exclusion (ARPE): individuals who are at-risk-of poverty (AROP) and/or suffering from severe material deprivation (SMD) and/or living in household with zero or very low work intensity (LWI).					
² At-risk-of poverty rate: share of people with an equivalised disposable income below 60% of the national equivalised median income.					
³ Share of people who experience at least 4 out of 9 deprivations: people cannot afford to i) pay their rent or utility bills, ii) keep their home adequately warm, iii) face unexpected expenses, iv) eat meat, fish, or a protein equivalent every second day, v) enjoy a week of holiday away from home once a year, vi) have a car, vii) have a washing machine, viii) have a colour tv, or ix) have a telephone					
⁴ People living in households with very low work intensity: Share of people aged 0-59 living in households where the adults work less than 20% of their total work-time potential during the previous 12 months.					
Sources:					
For expenditure for social protection benefits ESSPROS; for social inclusion EU-SILC.					

Table VIII. Product markets performance and policy indicators

Performance indicators DE	2001-2005	2006	2007	2008	2009	2010
Labour productivity ¹ total economy (annual growth in %)	1.0	2.8	1.4	-0.3	-5.3	3.4
Labour productivity ¹ in manufacturing (annual growth in %)	2.8	8.0	2.6	-5.6	-15.6	13.3
Labour productivity ¹ in electricity, gas, water (annual growth in %)	3.7	-6.4	4.3	3.4	-5.1	n.a.
Labour productivity ¹ in the construction sector (annual growth in %)	0.2	-0.5	-1.6	-0.2	-2.3	0.3
Patent intensity in manufacturing ² (patents of the EPO divided by gross value added of the sector)	5.2	4.7	2.4	n.a.	n.a.	n.a.
Policy indicators	2001-2005	2006	2007	2008	2009	2010
Enforcing contracts ³ (days)	n.a.	394	394	394	394	394
Time to start a business ³ (days)	n.a.	24	18	18	18	15
R&D expenditure (% of GDP)	2.5	2.5	2.5	2.7	2.8	n.a.
Tertiary educational attainment (% of 30-34 years old population)	25.5	25.9	26.5	27.7	29.4	n.a.
Total public expenditure on education (% of GDP)	4.6	4.4	4.5	n.a.	n.a.	n.a.
	2003	2005	2006	2008	2009	2010
Product market regulation ⁴ , Overall (Index; 0=not regulated; 6=most regulated)	1.6	n.a.	n.a.	1.3	n.a.	n.a.
Product market regulation ⁴ , Retail (Index; 0=not regulated; 6=most regulated)	2.6	n.a.	n.a.	2.4	n.a.	n.a.
Product market regulation ⁴ , Network Industries ⁶ (Index; 0=not regulated; 6=most regulated)	1.7	1.3	1.2	1.1*	n.a.	n.a.
<p>³ The methodologies, including the assumptions, of this indicator is presented in detail at the website http://www.doingbusiness.org/methodology.</p> <p>⁴ The methodologies of the Product market regulation indicators are presented in detail at the website http://www.oecd.org/document/1/0,3746,en_2649_34323_2367297_1_1_1_1,00.html. The latest available product market regulation indicators refer to 2003 and 2008, except for Network Industries.</p> <p>⁶ Aggregate ETCR. *figure for 2007.</p> <p>⁸ Score = [(Indicator - EU-27 average)/Standard deviation] *10</p> <p><u>Source:</u> <i>Commission services, World Bank Doing Business (for enforcing contracts and time to start a business) and OECD (for the product market regulation indicators).</i></p>						