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**Assessment of the 2011 national reform programme and convergence programme for
BULGARIA**

Accompanying the document

Recommendation for a

COUNCIL RECOMMENDATION

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

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1. INTRODUCTION

The Bulgarian economy is currently stabilising after an abrupt adjustment in 2009-2010. The turnaround was driven mostly by a continuing strong pick-up in exports, underpinned by favourable developments in world trade and replenishing of inventories. The economic downturn interrupted a period of strong economic growth and led to an unwinding of some of the accumulated imbalances. One of the main objectives of the country remains the sustained effort to catch up and the rise in the standard of living. Structural bottlenecks in several economic areas continue to hamper the prospects for long-term sustainable growth. In response to those challenges, the government foresees continued gradual fiscal consolidation and structural reforms as outlined in the National Reform Programme ("NRP") and the Convergence Programme ("CP") submitted to the Commission on 15 April 2011.

2. RECENT ECONOMIC DEVELOPMENTS AND OUTLOOK

2.1 RECENT ECONOMIC DEVELOPMENTS

Real GDP bottomed out in 2010 and growth returned in the second quarter of 2010, after falling cumulatively by 7.1% from peak to trough. Nominal wage growth has proved fairly resilient during the recession, forcing a large part of the adjustment on the employment rate, which fell by 8% over 2009-10. Recovery gained momentum in the second half of the year, resulting in a broadly flat real GDP for 2010 as a whole. The most relevant drivers of growth have been the strong upturn in exports, restocking of inventories and improved utilisation of EU funds. However, soft labour markets, along with higher precautionary saving from households and reduced credit growth, continue to weigh on household consumption, underlining the slow and uneven nature of Bulgaria's economic recovery. While the considerable rise in unit labour costs in 2007-2009 has eroded Bulgaria's competitiveness, labour costs per unit produced are still low enough to give Bulgaria a competitive edge over most EU Member States (Box 1).

Most of the imbalances highlighted by the crisis have started to unwind or have undergone a significant correction. The external imbalance adjusted rapidly throughout the downturn and the current-account deficit declined to 1% of GDP in 2010 from over 25% of GDP in 2007, reflecting the combined effect of limited external financing and strong demand for Bulgarian exports. The high growth rates in credit observed during the economic boom rapidly slipped from over 60% at the end of 2007 to only 3.6% at the end of 2009 and 0% in 2010, due to lack of demand and deterioration in credit quality causing the freeze in lending activity. However, the Net Financial Assets (NFA) position, which by 2009 had deteriorated to -113% of GDP, is expected to remain high and to adjust only slowly, while the real effective exchange rate underwent only limited adjustment as at the end of 2010. Gross external debt declined only moderately from 108% of GDP in 2009 to 96% of GDP as of January 2011, reflecting mostly inter-company borrowing and consisting predominantly of private nonguaranteed debt. The currency board successfully weathered the recent global economic and financial crisis, and the banking sector proved its resilience in the face of the sharp drop in capital inflows and rising financing costs. Overall, the banking sector remained well capitalised and stable, not least because of existing capital buffers, further countercyclical macro-prudential measures undertaken by the Bulgarian National Bank (BNB) and continued support from the parent banks.

2.2 OUTLOOK

GDP growth is projected to average around 2% in 2012-15, increasing slightly to 3% in 2016-2020. Unemployment will remain high in the near term, as employment will start rising only gradually. The investment/GDP ratio will be lower than in the pre-crisis period, although it is expected to remain relatively high, compared to other countries, at over 26% of potential output. Against this background, further increases in potential growth will have to come primarily from improved participation rates and gains in total factor productivity. Higher saving ratios for households and the corporate sectors are expected to support a progressive reduction in leverage ratios and to contribute towards a closure of the investment-savings gap, while credit growth are likely to recover gradually.

The external adjustment and the ongoing rebalancing of the economy may lead to a more sustainable composition of growth, while an increase in potential growth will depend, inter alia, on structural reforms. With the rebound of real GDP growth in 2011 and imports rising once again, projected gains in competitiveness stemming from further deceleration in nominal wages and only a partial recovery in employment will prevent the current account deficit from widening again. After the massive correction of external imbalances in 2009-10, the current account deficit is expected to remain broadly unchanged or to decline slightly over the medium term.

Risks to the baseline scenario are significant and there are major uncertainties with respect to the scale and scope of the recovery as well as to the post-crisis growth pattern. On the upside, there could be faster improvement in unemployment rates and lending conditions. On the downside, a sustained increase in commodity prices and inflation, together with a lasting decline in external financing and deleveraging could affect the recovery in domestic demand. Furthermore, continued economic weakness in the region and the external environment may keep a lid on external demand.

3. MONITORING, PROCEDURAL ISSUES AND GOVERNANCE

Bulgaria ensured close coherence between its National Reform Programme and its Convergence Programme. The two documents outline in an integrated manner the fiscal consolidation efforts on the one hand and key structural reforms and reforms underpinning macro-economic stabilisation on the other. The programmes were submitted to the Bulgarian National Assembly for consultation. Monitoring will be ensured by the Ministry of Finance. In the National Reform Programme, Bulgaria set its national targets in the field of employment, R&D, education, energy and climate change and poverty reduction for 2020 (Table 1). These targets provide a more long-term development trajectory for the necessary modernisation of the economy and put imminent reform priorities in a broader context.

Table 1. Bulgarian Europe 2020 targets

Europe 2020 targets	Current situation in Bulgaria ¹	Bulgarian Europe 2020 target in the NRP
R&D investment (% of GDP)	0.5%	1.5%
Employment rate (in %)	65.4%	76%
Early school leaving (in %)	14.7%	11%

¹ Eurostat figures. 2009 unless stated otherwise

Tertiary education attainment (in %)	27.9%	36%
Reduction of number of people in or at risk of poverty or exclusion	3.5 million people at-risk-of poverty or exclusion	To reduce the number of people at-risk-of poverty by 260,000 persons
Energy efficiency - reduction of energy consumption in Mtoe ²		Reduction of the energy consumption: 3.20 Mtoe
Reduction in greenhouse gas emissions (from sources not covered by the Emissions Trading System)	0% ³	+20% ⁴
Renewable energy (share of renewable energy in gross final energy consumption)	9.4% (Eurostat 2008)	16%

4. POLICY CHALLENGES, AGENDA AND ASSESSMENT

In its current stage of economic development Bulgaria is confronted with a number of policy challenges. These include:

- (i) consolidating public finances in the short term and putting fiscal policy back on a sustainable track over the medium term to preserve macroeconomic stability;
- (ii) mitigating the negative impact of the global economic crisis and accelerating convergence towards EU living standards by implementing structural reforms to enhance productivity growth and improve the efficiency of public spending; and
- (iii) preserving a well-functioning and stable financial sector as a precondition for sustainable economic development.

4.1 CHALLENGES

In the short run, Bulgaria is faced with the challenge of restoring and strengthening fiscal discipline in order to underpin macroeconomic stability, and this in a less benign and tax-rich growth environment. Correcting the excessive deficit as envisaged by the end of 2011 will help regain confidence and strengthen credibility of government policies vis-à-vis the markets. Over the medium term, achieving the objective of limiting the structural budget deficit to 0.6% of GDP is important in order to ensure that fiscal policy is supportive of the monetary regime in place. Such a medium-term objective would allow the absorption of EU funds to be increased by creating budgetary room for co-financing as well as for measures linked to the implementation of structural reforms. In addition, it will contribute to improving the long-term sustainability of public finances in the light of increasing ageing-related spending pressures.

² As estimated by the Commission. Mtoe = Million tonnes of oil equivalent

³ 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).

⁴ 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

Wage settlements have been out of line with productivity developments, thereby contributing to external imbalances by eroding the cost and price competitiveness of the economy (Box 1). This is because, in the boom years prior to the crisis, substantial overheating of the economy led to a considerable tightening of the labour market. Consequently, wages grew very fast, peaking at close to 20% year-on-year in the fourth quarter of 2007, well above labour productivity gains. Following the downturn and the associated adjustment in the labour market, wages have started to decelerate, although the wage growth of employees under labour contracts (representing 65% of the labour force and 72% of all employed) remained relatively high, at close to 10% in 2010. In the absence of nominal exchange-rate adjustments, wage increases above productivity gains hinder both competitiveness and internal restructuring of the economy towards productive and export-led sectors.

The current inefficiencies in public spending and the risks to long-term sustainability of public finances, *inter alia* in the fields of pensions and healthcare, also pose challenges for fiscal stability. In the area of retirement provisions, successive reductions of pension contribution rates and relatively large increases in discretionary pension benefit over the past few years have led to a substantial widening of the financing gap in the system. Healthcare reforms have largely stalled after an initial restructuring in the late 90s. This has led to repeated expenditure overruns and hospital arrears. Besides financial difficulties, the healthcare system suffers from poor accessibility and poor quality of service provision.

Although the financial sector remained relatively stable and profitable during the crisis, credit growth showed a marked deceleration. Banks' non-performing loans are still increasing and associated losses may put further pressure on their capital buffers. In addition, the relatively low level of financial development highlights the scope for potential growth of the sector, including that of capital markets, which could be very important for enhancing the catching-up process of the country.

Important challenges remain to further improve the business and regulatory environment and to progress in increasing the administrative capacity of the public sector. Notwithstanding recent improvements in the business environment, including a lowering of start-up capital requirements for firms, Bulgaria still lags behind in EU and world comparisons.⁵ Important efficiency issues remain, which are linked to the insolvency framework, the regulatory framework at the municipal level, the burdensome regime of construction permits, problems in contract enforcement, public procurement, and the level of cross-border trading costs. The low efficiency and quality of public services remains a key bottleneck to growth, while ineffective oversight by the regulatory and supervisory authorities could result in failure to tackle non-competitive behaviour. Various surveys and indicators point to high and widespread corruption perceptions, relatively high inefficiencies in government spending compared to other new EU member states, and lack of transparency in public policy making. The public administration suffers from a very low administrative capacity, including a generally low absorption of EU funds. The business environment and competitiveness also suffer from the poor state of public transport, the deficient environmental and broadband-internet infrastructure as well as the high energy-intensity (the highest in the EU) of the economy.

⁵ See for instance World Bank (2010), *Doing Business* (2010) and European Commission (2008), *The LIME assessment framework (LAF): A methodological tool to compare, in the context of the Lisbon Strategy, the performance of EU Member States in terms of GDP and in terms of twenty policy areas affecting growth*, European Economic Occasional Papers, 41.

Reforms aimed at ensuring a better and more efficient utilisation of the economy's labour potential would foster economic adjustment and sustain the catching-up process. Bulgaria's highly unfavourable demographic trends, resulting from massive emigration and low fertility rates are expected to have a negative impact on growth. While employment and participation rates have increased in recent years, youth participation rates are well below the EU average. Labour market participation suffers from a lack of well-targeted and tailored active labour market policies, as well as inefficient public employment services. A substantial problem with undeclared work⁶ further complicates the challenge and poverty is more pronounced than elsewhere in the EU.

Despite recent progress in reforming secondary-level education, challenges remain in terms of improving the overall efficiency and quality of education and training systems, particularly with respect to vocational and tertiary education and the promotion of life-long learning.

Box 2. Bulgaria's Commitments under the Euro Plus Pact

Bulgaria joined the Euro Plus Pact (EPP) on 24/25 March 2011 and incorporated the following commitments into its NRP for 2011-2015 and its Convergence programme for 2011-2014.

a. Foster competitiveness

1. Reduction of the administrative burden by 20% by 2012 and further streamlining of regulatory regimes;
2. Introduction of performance-based pay in the public sector;
3. Indexation of pensions and increases in compensation of employees are suspended until 2013;
4. Establishing Single Contact Points in line with the Services Directive;
5. Provision of student scholarships for equal access to education;
6. School education – setting up carrier development centres, compulsory pre-school preparation, assessment and carrier development of teachers;
7. Higher education – setting up a rating system for universities, student practices; provision of scholarships and government guarantees for bank credits; qualification and career development of the academic staff;
8. Adopting a Law on Innovations; Establishing entrepreneurship centres at high schools; Assessment of scientific organisations, setting up of excellence centres, technology parks, technology transfer offices; Developing a Roadmap for scientific infrastructure;
9. Analytical review of the practices for the collection of fees and the development of a draft concept paper on the Law on State Fees;
10. Enhancing e-governance.

b. Foster employment

1. Reduce the share of undeclared employment by improving the control activities (increasing the number of inspections and inspectors) and joined actions of the social partners, and increasing the quality of jobs;
2. Increase labour participation by (i) integrating the disadvantaged groups in the labour market; (ii) reducing youth unemployment through internships and apprenticeships; (iii) increasing employment among the elderly; (iv) enhancing the efficiency of the employment services provided by the public employment service; (v) creating a national web portal for job vacancies and (vi) creating a system for forecasting the skills and qualifications needed by the labour market.

⁶ The informal sector is estimated to account for around 30% of GDP and to employ 20-25% of the workforce.

c. Contribute further to the sustainability of public finances

1. Recent pension reform measures including raising the social security contribution rate, retirement age, required length of experience, etc. aimed at ensuring consolidation of the pension system as well as provision of adequate pensions;
2. Limit early retirement schemes by increasing the eligibility requirements for receiving early retirement pensions;
3. Strengthen the domestic fiscal framework by adopting a Financial Stability Pact including binding numerical fiscal rules.

The commitments made by the Bulgarian authorities under the Euro Plus Pact represent a continuity of the broader reform agenda outlined in the Convergence Programme and the National Reform Programme. In some areas such as fiscal governance, pensions, public administration, and education they step up ongoing reform projects. The measures broadly correspond to the macroeconomic bottlenecks endorsed by the ECOFIN in June 2010 in the context of the Europe 2020 Strategy. While some of them are intended to be frontloaded, many of the measures can only be expected to deliver results in the medium-term.

4.2 ASSESSMENT OF THE POLICY AGENDA

4.2.1 Macroeconomic policies

4.2.1.1 Public finances

The Bulgarian Convergence Programme update of 2011 projects, that real GDP growth will accelerate to 3.6% in 2011 and 4.1% in 2012. Whereas the turnaround in economic activity was initially driven by external demand and replenishment of inventories, growth is expected to become gradually more balanced. The contribution of external trade will turn slightly negative as from 2012 (-0.4% against 0.1% in the Commission services' forecast), reflecting a higher import dynamic led by a stronger recovery in investments and consumption. The programme's projection of economic growth is more favourable than that of the Commission services' forecast over 2011-12 based on the assumption of a larger contribution from domestic demand. The programme assumes a considerable lagged impact of the downturn on the labour market, with employment growth following the steep decline of 5.9% in 2010 forecast to remain low in 2011 (0.7% in the Commission services' forecast) and to grow by 0.7% in 2012 (1.1% in the Commission services' forecast). In the light of the increase in the prices of commodities, the programme's scenario for HICP inflation converges with that of the Commission services' forecast (3.9% against 4.2% in 2010 and 3.4% in 2012). The programme also assumes continuation of the existing currency-board arrangement and current exchange-rate parity, making exchange-rate pressures on inflation less likely.

The programme's baseline macroeconomic scenario for 2011-2012 is considered to be more favourable than that of the Commission services' forecast. The programme projects growth to remain above 4% in 2013-14, significantly overshooting the 2.2% average potential growth included in the Commission services' forecast⁷. The programme's baseline macroeconomic scenario for 2011-12 can be considered more favourable than that of the Commission services' forecast. The output gap, as recalculated by Commission services based on the

⁷ However, the real GDP growth projections are lower than potential growth estimates computed for the period before the crisis.

information in the programme following the commonly agreed methodology, is estimated to gradually narrow from 2011 onwards and to turn positive in 2014. These projections are broadly in line with the Commission services' forecast, which foresees the output gap closing later in 2015, due to a slightly weaker recovery.

The previous convergence programme update was based on the initial 2010 budget, approved in December 2009, which targeted a small general government budget deficit of 0.7% of GDP on a cash basis. However, in view of the deteriorating fiscal situation, the government revised the 2010 budget in July 2010, reflecting a significant downward adjustment of projected government revenues by 2.9% of GDP while overall expenditure was increased by 1% of GDP. Compared to the revised general government deficit target for 2010 of 3.8% of GDP, the final outcome of a deficit of 3.2% of GDP compares favourably. This resulted primarily from: i) more favourable economic developments in the second part of 2010 that contributed to improved tax revenues (notably from VAT); ii) cutbacks in capital expenditure; and iii) firm control over current expenditure.

The main goal of the programme's medium-term budgetary strategy is to achieve a gradual fiscal consolidation during the period 2011-2014. This should bring the deficit below the 3% reference value in 2011 in compliance with the Council Recommendation of 13 July 2010 under the Excessive Deficit Procedure. In addition, it should help in making further progress towards achieving the MTO of a deficit of 0.6% of GDP in 2014. The authorities remain committed to the fiscal policy strategy aimed at achieving a headline balanced budget over the medium-term and avoiding a deterioration of the deficit (according to the ESA95 rules) above 2% of GDP. The medium-term budgetary objective (MTO), defined in structural terms, has been revised⁸ downwards (compared to the previous programme update) from a surplus of 0.5% of GDP to a deficit of 0.6% of GDP. However, it remains more ambitious than the minimum required level, reflects the objectives of the Stability and Growth Pact and it is expected to be achieved by the end of the programme period (2014).

In nominal terms, the fiscal targets in 2011-2014 involve subsequent improvements in the general government budget balance with planned consolidation efforts of 0.7% and 1% of GDP for 2011 and 2012, respectively, and 0.5% of GDP for 2013 and 2014. In structural terms⁹, after a considerable budgetary adjustment of more than 2% of GDP in 2010, the fiscal effort of 0.1% of GDP in 2011 is well below the adjustment of at least 0.75% of GDP recommended by the Council. In 2012-2014 the projected annual fiscal efforts are 0.6%, -0.1% and 0.1% of GDP, respectively. Consequently, the envisaged average annual structural fiscal effort after the planned correction of the excessive deficit in 2011 is well below what was recommended by the Pact – i.e. 0.5% of GDP. The programme could have ensured faster progress towards the achievement of the MTO, in the light of the gradually improving economic outlook and the uncertainties stemming from the recent considerable macroeconomic volatility.

For 2011, the convergence programme update projects a deficit of 2.5% of GDP, which is 0.2pp lower than that envisaged by the Commission services in their spring forecast. The authorities plan to reach the 2011 fiscal target as a result of the expected economic recovery,

⁸ The programme does not provide an explanation for the downward revision. Most likely it reflects the decline in potential growth as a result of the economic downturn as well as the ambition to frontload the absorption of EU funds which would necessitate leveraging them with co-financing from the national budget.

⁹ As measured by the change in the (recalculated) structural balances.

better revenue collection, higher spending efficiency and a freezing of major expenditure items in nominal terms at broadly their 2010 level. The projected lower increase in budget revenue in the Commission services' forecast is based on a more conservative assessment of the impact of fiscal consolidation measures. The budgetary adjustment in 2012-2014 is based on an extrapolation of the no-policy-change assumption, and the update of the programme does not provide details on planned budgetary measures to achieve the fiscal targets, other than the macro-structural measures, which have a longer term impact (Box 3) in the context of the EU2020.

Box 3. Main measures

On the revenue side, the 2011 increases in excise tax rates on some energy products, cigarettes and tobacco are expected to result in an increase in revenue of 0.14% of GDP. The increase of the pension contribution rate by 1.8pps. should bring additional revenue of 0.5% of GDP, while a new tax on insurance premiums is estimated to yield 0.03% of GDP. In addition, the minimum mandatory insured income thresholds for main economic activities and professional groups will be increased by 5.6% compared to 2010 (+0.14% of GDP). The authorities also plan to levy a 10% withholding tax on the income of foreign-controlled legal entities established in preferential tax regime areas (off-shore zones) with a source in Bulgaria. Furthermore, a set of measures is aimed at improving tax enforcement and collection of tax arrears, i.e. the incrimination of the non-payment of social security contributions as well as an increase in the number and frequency of tax audits. On the expenditure side, compensations of employees in the public sector, subsidies¹⁰, social expenditure and maintenance outlays will be kept at their 2010 levels, while indexation of pensions will be frozen in 2011 and 2012.

Main budgetary measures (% of GDP)

Revenue	Expenditure
2011	
<ul style="list-style-type: none"> • Increase of the VAT rate for organised tourism services and of some excise duties to reach the minimum rates for the EU; introducing tax on insurance premiums (0.2%) • Increase in social security contributions by 1.8pps and raising the minimums insurance thresholds for the main groups of professions by 5.6% (0.6%) 	<ul style="list-style-type: none"> • Freezing of public sector wages, intermediate consumption and social payments at their 2010 level in nominal terms
2012	
<ul style="list-style-type: none"> • n.a. 	<ul style="list-style-type: none"> • Freezing the indexation of pensions and increases in public sector wages. • Improving the efficiency of public spending (-1.9%) • Better utilisation of the labour potential (-0.21%)
2013	
<ul style="list-style-type: none"> • n.a. 	<ul style="list-style-type: none"> • Improving the efficiency of public spending (-0.14%) • Expiry of the freezing of pension indexation
2014	
<ul style="list-style-type: none"> • n.a. 	<ul style="list-style-type: none"> • Improving the efficiency of public spending (-0.23%)

Note: The budgetary impact in the table is the impact reported in the programme, i.e. by the national authorities. A positive sign implies that revenue / expenditure increases as a consequence of this measure.

The main macro-structural measures envisaged with respect to the Europe2020 objectives, i.e. reallocation of public expenditure towards more growth enhancing items, better and more efficient utilisation of the labour potential, improving the quality and efficiency of education and training systems and reducing the number of people living in poverty by 260 000, should lead to a decline in expenditures as a share of GDP in 2011-2014 by

¹⁰ In spite of a steady increase (35.3% from 2000-2008), Bulgaria has one of the lowest implicit tax rates on energy in EU (source: Taxation trends in the European Union, Eurostat, 2010)

When assessed against a prudent estimate of medium-term potential output growth the projected budgetary expenditure seems to ensure an appropriate adjustment path towards the MTO, taking into account that the MTO is more ambitious than the minimum required level. However, the projected growth of expenditure in 2012 and 2013 could jeopardise the achievement of the more ambitious MTO selected, as it exceeds the reference rate of medium-term potential growth by 0.4% of GDP in two consecutive years, thus limiting the room for fiscal manoeuvre in the latter years of the programme after the correction of the excessive deficit.

Over the past several years the government debt-to-GDP ratio has been on a downward path, falling to below 14% at the end of 2008. The debt reduction has been driven mainly by high primary surpluses, strong nominal GDP growth, and substantial privatisation receipts. However, since the start of the financial crisis, with the fiscal balances turning from a surplus to a deficit, the trend reversed and the debt ratio increased moderately to around 16% in 2010 (Table IV). Nevertheless, Bulgaria still had the second-lowest debt ratio of all EU Member States at the end of 2010. This favourable government debt position has been supported by a gradual decrease in accumulated net financial assets. This mainly happened through the government fiscal reserve account with the central bank that has gone down to around 8.5% of GDP in December 2010. The programme projects that government debt will peak at 19% of GDP in 2012 and then fall and stabilise at around 17% of GDP over the remainder of the forecasting period until 2014. The underlying debt dynamics reflect a gradual reduction in the primary deficits, a positive impact of nominal GDP growth, and further debt-reducing stock-flow adjustments (except for 2012 when the government plans to issue debt on the international markets in order to meet its debt-repayment obligations under global Euro bonds of around 2% of GDP that fall due in 2013). The programme also envisages certain controversial stock-flow adjustments such as persistently high cash/accruals discrepancies that are not further elaborated. The projections for the debt-to-GDP ratio in the programme are broadly plausible taking into account the Commission services' spring 2011 forecast and the latest information available.

Bulgaria is at medium risk with regard to the long-term sustainability of public finances (Table V). The long-term cost of ageing is below the EU average. The current budgetary position compounds the cost of ageing. Based on the current fiscal position, the debt-to-GDP ratio is likely fall by 2020, thus remaining far below the reference value of 60%. Implementing the programme would leave the debt-to-GDP ratio far below the reference value of 60% by 2020.

The Bulgarian fiscal framework performed relatively well in the favourable economic environment prior to the crisis. Fiscal targets were consistently met and sizeable fiscal buffers were accumulated. However, under the impact of the economic crisis, the 2009 deficit brought some negative ex-post surprises, the fiscal rules to keep the budget balanced or in surplus and the budgetary expenditure below 40% of GDP were breached and the 2010 fiscal targets were revised sharply downwards. This appears to have been also related in part to procedural weaknesses with regard to expenditure planning and implementation control on an accruals basis. It also reflected that the proceeds from the economically favourable times prior to the crisis - and the revenue windfalls resulting from buoyant economic activity and a very tax-intensive growth structure - were not all saved and instead were used to finance relatively high ad-hoc pension increases, public sector wages dynamics outpacing productivity gains

and social security rate cuts. Since then, the authorities have taken several initiatives to improve not only expenditure control but also monitoring and reporting systems in order to limit the risk of expenditure overruns and the reappearance of arrears. A special clause in the 2011 State Budget Law gives to the Council of Ministers exclusive power to define and update ceilings for the contractual obligations of central government institutions and entities. This will enhance central control at the planning and approval stages, and thereby helping reduce the deficit bias, while maintaining some flexibility at the budgetary execution stage. To enhance fiscal discipline, increase predictability, reduce macroeconomic volatility and ensure a less pro-cyclical fiscal policy the authorities plan to adopt a comprehensive legislative package to strengthen the fiscal rules and the medium-term budgetary framework. Some of the provisions are due to be enshrined in the Constitution. The package is to take effect in time for the implementation of the 2012 budget.

4.2.1.2 Financial sector

Developments in the financial sector have been dominated by a significant slowdown in credit growth. Against a background of increased risks to solvency and liquidity, the conservative behaviour of Bulgarian banks helped maintain financial stability. No bank has suffered capital insufficiency, thereby avoiding recourse to public money or state guarantees. Policy actions by the authorities focused on ensuring the continuing funding of foreign-owned banks by their parent institutions and on stepping up supervision, while maintaining high regulatory standards. After reaching year-on-year growth rates of 64% in December 2007, bank credit growth decelerated significantly to single-digits from September 2009 onwards. As a consequence, the credit-to-GDP ratio has stabilised at slightly above 70% for the last two years. The bank credit deceleration is attributable to increased prudence on the part of banks and conservatism against a background of greater solvency and liquidity risks. The ratio of non-performing loans jumped from 2.4% at the end of 2008 to 11.9% in December 2010. Despite this marked deterioration in the quality of banks' assets, and due to sustained profitability, the capital adequacy of banks has actually increased during the same period, with the regulatory ratio reaching 17.5% at the end of 2010. While liquidity tensions were relatively strong throughout 2008, when interbank rates rose above EONIA, they eased significantly in 2010, and actually resulted in money market rates below the level of EONIA.¹¹

4.2.2 Labour market policies

While labour market performance has improved remarkably over the past decade, labour is still underutilised and a large share of resources remain untapped (in 2009, labour supply growth was -1.8%). The employment rate increased constantly until 2001 before deteriorating due to the economic downturn, the effects of which are expected to continue to weigh on the situation for some time. A significant share of employment creation was located in relatively low-skilled segments. The unemployment rate surged from 5.4% in 2008 to 10.2% in 2010, while for young persons (aged 15-24) it reached 23.2% in 2010. The crisis also severely affected the low skilled who account for almost 70% of those who are unemployed. The share of long-term unemployment (2010: 46%) is higher than the EU average (2010: 40%), and there may be a risk of it becoming structural.

¹¹ EONIA: Euro OverNight Index Average.

Against this backdrop, young persons, as well as the pool of low-skilled workers, are an important but underutilised labour resource to help sustain and generate economic growth. Surveys¹² highlight difficulties in matching jobs with the necessary skills, particularly in relation to new technologies. The lack or low uptake of flexible work organisation arrangements as well as regulatory disincentives for job creation and self-employment hinder job transitions and maintain the share of undeclared work. Public employment services on activation, job search, matching and retraining, are still of relatively low quality.

The Bulgarian NRP adequately recognises and identifies the existing challenges and envisages a number of reform measures to address them. It includes specific programmes to improve the transition of young people into the labour market. According to the NRP, legislative and policy measures to step up education reform, if implemented swiftly, are likely to contribute to linking the education and employment cycles more effectively and improving labour productivity. Measures aimed at making the labour market more flexible and enhancing the quality of job services may also help in matching the labour market needs.

4.2.2.1 Make work more attractive

Increasing participation rates and encouraging people to work longer represents a strategic investment in human capital while, given the demographic decline, it should contribute to the sustainability and adequacy of the social protection systems. The biggest potential for future productivity gains lies in the young persons group. The long-term unemployed and the socially excluded and mostly low-skilled groups, and the Roma minority in particular, represent unutilised resources whose integration in the labour market will require sustained intervention.

The youth activity rate has stayed consistently below two thirds of the EU average (2009: 29.5%; EU: 43.8%). The youth employment rate was 24.8% in 2009 (EU: 35.2%). More specifically, Bulgaria also has the highest share of young people who are neither in education nor in employment (19.5% of persons aged 15-24). The main barrier to youth participation in the labour market is the lack of opportunities to combine education and work. Education system outcomes are weak and labour market entry points and activation policies (job search, consultation) that are adapted to the needs of young people are currently insufficient. The Roma, the majority of whom drop out of education and have no employment record, are confronted by multiple social and economic barriers, which require a multi-faceted approach (including adequate social work and education services).

The NRP outlines several large-scale skills programmes and paid apprenticeships supported by the European Social Fund to assist transition to work, as well as ESF-funded career centres at universities and high-schools. In partnership with the social partners, a National System for Skills forecasting is being developed. As the majority of these programmes have only recently started or are yet to be launched, their timely implementation will be critical in preventing further falls in labour supply and in moving towards the NRP employment rate target of 76%. As regards youth, the NRP does not outline a strategic and integrated policy

¹² Skills mismatches have been a structural problem in Bulgaria for a number of years already. Surveys among employers are regularly carried out by the **National Statistical Institute**, as well as the **Employment Agency**, which registers the number of job vacancies against the skills profile of the unemployed available. Also see the World Bank policy note: http://siteresources.worldbank.org/INTBULGARIA/Resources/EducationPolicyNote_EN.pdf

approach (as opposed to a list of work and training programmes) that would combine targeted employment and training service packages adapted to the education profile of the target group.

4.2.2.2 Help the unemployed get back to work

In Bulgaria, labour market participation barriers are closely linked to insufficient provision of properly targeted and tailored active labour market policies (ALMP), as well as to non-modernised and underfunded public employment services. As demonstrated by a recent national study¹³, the quality of public services on activation, job search assistance and retraining remains low. Spending on these services is also low. ALMP coverage is also limited with only 12 out of every 100 people who would like to work participating in activation measures. Direct job creation measures during the past decade have helped shorten the periods of unemployment, but they do not have a lasting impact on employment. Internal regional mobility of the labour force is very low. At the same time, regional unemployment rates vary substantially, with 33.3% of NUTS II regions (municipal level) having an unemployment rate at 150% or higher than the national average. Apart from the weak targeting and ineffectiveness of ALMP, low spending efficiency hampers the functioning of the labour market (e.g. consider the number of programmes managed by the Employment Agency). The same is true for performance monitoring and evaluation and strategic planning. There has been insufficient modernisation of infrastructure at labour offices, while investment in improving quality, and spending on job search and consultation has also been restricted. Furthermore, the above-mentioned study highlights the need to ensure proper monitoring of actions.

The NRP focuses on improving the **quality of the Employment Agency**, in particular by using the European Social Fund (ESF) to set up one-stop-shops; train staff at labour offices; organise regional job fairs and more regional employment programmes; and provide better data exchange. However, the amount of 4 MEUR allocated to this programme may not be sufficient to match its ambitious goals. Available EU funding resources provide significant financing to meet the important strategic aims of public employment service reform in Bulgaria and invest in physical and human resources at labour offices. Furthermore, the NRP does not adequately address the need to develop measures that ensure better profiling and a proper follow-up of job seekers, including through a series of interviews, reporting and adapting the services packages as appropriate. In an effort to improve mobility, the ESF will support entrepreneurship activities for unemployed persons through business skills training and the provision of microfinance loans.

4.2.2.3 Balance security and flexibility

The functioning of the labour market is hampered by overall weak legal compliance in the area of undeclared work, which is a major challenge for the Bulgarian economy as a whole. Bulgaria has the highest ratio of undeclared work in the EU, estimated at 22-25% of GDP and it accounts for up to one quarter of all employees¹⁴. Various bureaucratic and regulatory

¹³ "Evaluation of the net effect of active labour market policies in Bulgaria" - Ministry of Labour and Social Policy, 2010

¹⁴ Hidden Economy Index 2010, Centre on the Study of Democracy, <http://www.csd.bg/>; Another study carried out by the Association of Industrial Capital in Bulgaria points to an even higher percentage with undeclared work making up as much as 40% of GDP: <http://bica-bg.org/uploads/PPP-08-09-2010-Final-to-be-printed-1.pdf>

rigidities, such as high administrative costs that small businesses find difficult to meet, hinder labour market adjustments and job creation. This also significantly reduces the collection base for public revenue.

The lack of and/or low uptake of flexible work arrangements further reduces incentives to take up regular employment. Temporary, part-time and self-employment account for a low share of overall employment (16.5%, or half the EU average) and are usually taken up because of the lack of permanent available jobs. Part-time work (only 1% of employees; EU: 15.1%) is economically unattractive for both employees and employers, as it does not provide sufficient income, while employers prefer the security of employees who are available full-time. Flexitime is rarely practised, and the operation of private temporary work agencies which could play an important role as an additional entry point into the labour market has not yet been regulated in Bulgaria. Given that Bulgaria still has the EU's lowest productivity levels, flexible employment opportunities could help address labour market and skills issues. A successful approach to combating undeclared work involves a combination of both legal enforcement and incentives for business (e.g. reducing administrative costs) and workers (e.g. in-work benefits).

The NRP gives priority to legal enforcement through strengthening the inspectors' capacity, building on successful efforts by the labour inspectorate and revenue authorities in 2010 to jointly step up their control efforts. The social partners are closely involved in raising awareness among business and employees alike of the legal advantages of leaving the shadow economy. In 2011 Bulgaria intends to transpose the Directive on Temporary Work Agencies and sign a national agreement, as well as to expand cooperation with private job service providers.

4.2.2.4 Invest in education and training

Despite an above-average level of **educational attainment** Bulgaria has over 40% low achievers in literacy and numeracy. This contrast highlights weak quality standards and insufficient alignment with the needs of the labour market. More importantly, school curricula and teaching methods in both schools and universities do not live up to the growing expectations of new education knowledge and skills on the labour market, such as key competences, ICT and entrepreneurship skills. The ESF currently co-finances short-term programmes and measures, but the results do not appear to feed into a strategic approach. A major challenge for Bulgaria in responding to demographic developments remains to expand coverage against the backdrop of shrinking cohorts of students, in particular to increase participation in pre-school education (2009: 78.5%; EU: 92.5%) and to reduce the incidence of school drop-out and young people outside the education system. Early school leaving, at 14.7% in 2009, is around the EU average (14.4%). This is due to a number of factors, including poverty, and is particularly serious among the Roma (early school leaving among this group is estimated to be 43% in 2008). The low educational achievements are linked to weak autonomy of schools, lack of incentives for better performance, a poor national assessment system, and insufficient accountability (participation of parents, monitoring, and municipality-school relationships). The upcoming Law on Pre-School and School Education is expected to provide some solutions, building on the positive results of the recent school decentralisation reform. This law is also intended to increase pre-school education, which is the foundation for further learning, and to improve learning outcomes and educational achievement in primary and secondary level.

Tertiary attainment rates (27.9% in 2009) remain below the EU average (32.3%), despite a positive trend in the last decade. Growth in the number of maths, science and technology graduates between 2000 and 2008 has been modest (21.8%) despite favourable employment prospects and high returns. Bulgaria has significantly delayed its reform of higher education. The new Higher Education Law, already tabled in 2010 but subsequently withdrawn, would provide an efficient single legislative instrument to deal with reform needs. These include: improving quality; increasing the mobility of higher education students, anticipating skills needs and modernising curricula; enhancing competition between higher education institutions; and improving the governance of universities. Slow progress in the legislative area is hampering the increase in tertiary achievement rates, the improvement of the quality of higher education institutions, and, therefore, smart economic growth. Opportunities for up-skilling and retraining remain insufficient, which hamper the overall competitiveness of the labour force.

4.2.2.5. Combat poverty and promote social inclusion

Bulgarian citizens experience the highest risk of poverty or exclusion in the EU (46,2 % against 23.1% in the EU). The relative situation of the elderly has deteriorated markedly during the last 4 years and the risk of poverty of people aged 65+ reached 39.3% in 2009 as against 19.9% in 2006. Given the current and projected demographic situation, meeting the NRP targets for poverty reduction will largely depend on the proper design of policies for older workers and disadvantaged people as well as on the effectiveness of social transfers. The level of expenditure on social benefits remains among the lowest in the EU (15% of GDP in 2008 against 25.3% in the EU).

The NRP announces the development of an operational strategy for the integration of the Roma (estimated at 10.3% of the population;¹⁵), intended to incorporate aspects of employment, education, health and housing in a single comprehensive plan. Bulgaria has also undertaken to address its poor record on the integration of the almost 8000 parentless and disabled children living in state institutions by closing down 137 homes based on an Action Plan.

4.2.2.6 Reform pension systems

After negotiations with the social partners, consensus was reached in 2010 on the need to reform the pension system in order to improve its long-term sustainability and to enhance the adequacy of pensions. However, the effects of the measures introduced are far from certain. The pension reform is not linked to the life expectancy in the country or to the situation of the health and long-term care systems. The implementation period is from 2011 to 2026 with most of the measures taking effect in the second half of the period which could put both their implementation and the sustainability of the first pillar of the pension system at risk. The statutory retirement age for women and men will be increased only after 2021 by six months each year until reaching 63 years of age for women (2026) and 65 years of age for men (2024), without addressing the gender difference. Bulgaria thus remains one of the few EU Member States that discriminate between female and male pension age beyond 2020.

¹⁵ 2011 census results are expected in July this year

4.2.3 Growth enhancing structural measures

4.2.3.1 The business environment

The regulatory and administrative system does not adequately support the activities of enterprises with numerous and complex permit procedures, a large number of (high) administration fees and taxes, illegal local regimes, late public payments¹⁶, etc. Moreover, the national transposition of EU legislation is characterised by "gold plating". Bulgarian enterprises have a low degree of internationalisation which has exacerbated the impact of the shrinking of domestic consumption due to the crisis.

The implementation of the first Programme for Better Regulation (2008-2010) has enhanced the business environment and achieved tangible results, such as the abolition of 112 illegal municipality regimes, reduced minimum paid-in capital for registration of a company as well as the removal/facilitation of 32 licensing regimes. The 2nd Programme for Better Regulation (2010 – 2013) has been in force since 1 June 2010 and once again sets out concrete actions to further improve the regulatory and administrative environment.

Despite the recent reforms enacted to improve the business start-up conditions and progress in the area of paying taxes, Bulgaria's world rankings still lag behind the best performers in EU and world comparisons. In the Doing Business Report published by the World Bank the country ranking worsened (from 44 in 2010 to 51 in 2011), pointing to excessive red tape and inefficiencies in the business environment, including contract enforcement, the insolvency framework, public procurement and competition.

4.2.3.2 Administrative capacity

The administrative reform has focused only on reducing administrative staff, with little attempt to remove other sources of administrative inefficiency. An improvement in administrative capacity could be achieved by acting on the results of a functional review carried out in 2009. A new model for performance-based payment in the public administration will be developed with a view to enhancing the human resources dimension. However, the reform of public administration is not yet sufficiently addressing key issues such as employment stability, de-politicisation, adequate professional knowledge and skills, and ability to formulate policy. Nor do current measures satisfactorily address the effectiveness of the judicial system in the fight against corruption by the competition and regulatory authorities which, besides having a negative impact on the economic and social development of Bulgaria generally, affects the implementation of EU funds as well. The NRP does not include specific measures for boosting the effective use and absorption of EU funds. Bulgaria's ability to absorb EU funds remains low despite government efforts to tackle the problem (38% of the EUR 7 billion in ERDF¹⁷ and Cohesion Fund support for 2007-2013 has been contracted, but by April 2011, the Commission had only received payment claims for less than 7%).

4.2.3.3 Access to finance

¹⁶ The accumulated government payment arrears with respect to the private sector are still high. During 2010, the arrears have decreased from approximately 800 mil. BGN to around 450 mil. BGN

¹⁷ European Regional Development Fund

Access to finance for businesses and in particular for SMEs has become more difficult following the economic crisis. Bank lending to businesses, particularly to start-ups, young and innovative enterprises, has slowed dramatically, negatively affecting the development of innovative products. This has negative repercussions on SMEs capacity to match EU Structural Funds and secure the required co-financing with bank loans. Private capital finance is undeveloped and its market share is insignificant. There is no integrated venture capital framework setting the conditions for financing start-ups. Venture-capital entities (e.g. business angels) can be found in information technologies; however, these tend to be the exception rather than the rule. One of the more important measures to address the problem has been the establishment of the JEREMIE financial instrument, which makes EUR 200 million available for SME venture capital, equity and guarantee funds. However, so far start-up difficulties have delayed widespread disbursement.

4.2.3.4 Transport

Both national and Trans European transport networks are characterised by bad connections, poor physical condition and inappropriate rehabilitation and maintenance of the transport infrastructure. None of the planned EU cross-border TEN-T rail or road projects have been completed. As regards road transport the motorway network between major cities and with neighbouring countries in Bulgaria is incomplete, while inadequate highway maintenance results in bad road conditions and poor road safety. The management, regulatory and organisational structures in the road sector administrations are characterised by inflexibility and red tape, thus leading to delayed project planning and implementation. Inefficient public procurement and insufficient project funding lead to delays in scheme delivery. Currently, the Road Infrastructure Agency (RIA) is solely responsible for all public roads outside the municipalities. The Bulgarian government has started to introduce reforms in the sector by establishing a co-ordination unit in the Ministry of Regional Development to enhance the monitoring of the Road Agency, as well as creating a parallel, new road implementation structure known as Special Infrastructure Projects, which is to oversee the realisation of the complex and costly Struma motorway to Greece, as well as the Hemus and Cerno More (Black Sea) motorways. However, these new structures still have to prove themselves and there is a risk that they may overlap.

The **rail transport** sector is characterised by the deteriorating quality, frequency and speed of passenger services, ageing locomotives and rolling stock, redundant infrastructure, insufficient funding and inflexible management, regulation and organisational structures. This has led to poor track conditions and many speed restrictions and routes and service patterns that do not meet market requirements. Government reforms are aimed at strengthening the financial sustainability of the railway sector as well as creating the administrative capacity needed to plan and manage infrastructure projects efficiently.

4.2.3.5 Services

Bulgaria has notified the Commission that the transposition of the Services Directive has been completed. However, the results still remain to be seen given that few sector-specific changes have yet been adopted. Furthermore, the Bulgarian "Single Point of Contact" is online, but does not yet allow completion of administrative procedures online (at the present stage it offers information only).

4.2.3.6 Public procurement

The application of public procurement legislation shows major weaknesses and the irregularity rate is as high as 60% of all procedures verified and is even higher for large public infrastructure projects where the authorities have the obligation to apply ex-ante control. The administrative authorities do not have sufficient capacity to advise on public procurement procedures and to perform checks. The capacity of the Public Financial Inspection Agency has been substantially reduced. As a result, in 2009 the agency performed ex-post controls in only 12% of all public procurement procedures. Moreover, the ex-post administrative checks do not follow a proper risk assessment. The introduction of the system of ex-ante control should help to remove shortcomings in the procedure for large structural projects. However, the Public Procurement Agency lacks sufficient capacity to perform ex-ante checks and to follow up on its recommendations. Furthermore, cooperation among the different administrative authorities in charge of implementing the various aspects of public procurement legislation is weak, while judicial authorities are not in a position to effectively protect public procurement against conflicts of interest. Internal procedures do not allow for the effective detection of conflicts of interest which could be communicated to the prosecution authorities, and the respective administrative sanctions do not have a sufficiently deterrent effect.

4.2.3.7 Energy and climate change

Despite a reduction of Bulgaria's energy intensity by almost one third in the last decade, the underlying issue is the production and use of energy production. Bulgaria has by far the highest energy intensity and greenhouse gas (GHG) emission intensity of the EU. While it is not a major owner of primary energy resources, from an EU perspective, the Bulgarian economy is rather specialised in energy-intensive activities. This is compounded by concerns about security of energy supply and vulnerability to energy price shocks, inadequate functioning of energy markets, taxation of energy and processing of (bio)-waste, combined with a steep increase in air pollution and inroads into Bulgaria's substantial biodiversity assets.

The combination of a very high energy intensity, low energy efficiency and moderate-to-high dependency on a limited number of foreign primary energy sources and its own low-caloric lignite reserves appears to pose threats to sustainable growth on the medium term, such as energy price shocks, and the burden of more stringent environmental and GHG emission reduction requirements. The Second Bulgarian National Energy Efficiency Plan attempts to address energy performance of buildings in particular.

Connection deficiencies, insufficient cross-border interconnectors, high import dependency and inadequately functioning and isolated energy markets may expose the economy to significant supply shocks. The investment environment in the energy sector is hampered by inappropriate regulation which is not conducive to smooth infrastructure development.

Bulgaria has a poor record in implementing the Internal Energy Market. The national regulatory authority (NRA) should ensure adequate independence of the Transmission System Operator based on the Third package, even though prices are still regulated in the electricity and natural gas markets. In particular, energy prices are very low for industry, which could create a stimulus to specialise in energy intensive activities and a disincentive to use energy as efficiently as elsewhere in the EU. Furthermore, while legal barriers to entry have been removed, the market organisation characterised by limited transparency in the price formation

and the power of energy companies in the various segments of the market, could undermine the incentives of market-based instruments to combat GHG emissions and pollution.

Bulgaria has made a commitment to achieve a target of 16% of renewable energy sources in final energy consumption and a 10% share of renewable energy in the transport sector by 2020. The achievement of these targets will depend on the implementation of the Renewable Energy Action Plan, in particular for measures relating to the transport and electricity sectors.

The recent trend in the greenhouse gas emissions appears in line with the 2020 national target defined at the European level (+20% compared to 2005 levels), but as the economic crisis tends to have reduced emissions, caution is needed (especially in the road transportation sector given its weight in the national emissions and its current trend). The NRP does not contain an assessment of the sufficiency of the existing and proposed emissions reductions measures to reach the 2020 target or operational targets (such as domestic targets and/or intermediate targets and/or sectoral targets). It also does not specify measures for the road transport sector.

4.2.3.8 Research and Development and Innovation, and the Digital Environment

At 0.49% of GDP in 2008 – i.e. around four times less than the EU-27 average - the R&D intensity of Bulgaria is one of the lowest in the EU, Private R&D investment is the lowest in the EU, mostly as a result of sectoral specialisation in low technology sectors and the current scarcity of medium and high technology firms. The Research and Innovation (R&I) system is highly fragmented, with many actors and no critical mass, an evaluation culture of research institutions and fairly unattractive research careers. As regards governance, there is no consistent and targeted policy in the field of R&I, and no consensus on national priorities. The share of competitive funding is rather low compared to the institutional funding of R&I, while the transparency of the procedures for funding allocation could be further improved.

The Bulgarian government has set an ambitious national target of 1.5% of GDP for R&D intensity by 2020, which would be reached only if vigorous efforts and reforms based on a long-term strategy are put in place and implemented in a sustained and consistent manner. A National Research Strategy including measures to improve governance and increase the share of competitive funding has been prepared but not yet adopted. Issues of particular importance in the strategy are the setting of a limited number of priorities, the improvement of the framework conditions necessary for private investment in research and innovation, and the measures to increase the attractiveness of a career in research. Other legislative measures are in place or in preparation – such as the Law on Academic Staff Development, the Law on the Bulgarian Academy of Science, the Law on Innovation - but it is not clear at this stage whether they will be properly articulated or how they will fit in the above mentioned Strategy. A related risk is that research measures may not be sufficiently aligned with innovation measures and that sectoral R&I priorities are not consistently selected in close consultation with relevant ministries and stakeholders. This could impede the selection of the most appropriate R&I areas, namely those in which Bulgaria has recognised scientific strengths, as identified by international benchmarking, or which contribute to address societal challenges and can attract business R&D activities.

In addition, at the moment the strategy lacks an associated multiannual funding framework (which would include the smart use of structural funds) and a clear delineation between the

bodies in charge of monitoring/implementing the numerous measures planned foreseen. Of particular importance are the measures to increase the attractiveness of a career in research, by focusing resources on a few, highly attractive research positions. This could be done through an evaluation by an independent, international and high level group of experts which would select the most productive research groups in the universities and research institutes, including those of the Bulgarian Academy of Science, following models of EU countries with a well-established evaluation culture, such as the UK or Austria, as well as through improved linkages with Bulgarian researchers established abroad.

Bulgaria has a very low fixed broadband penetration, at 14.9% it has the second-worst figure in the EU, and only slightly more than half the EU average of 26.6%. This is due in particular to low coverage in rural areas, where the most recent figure available (December 2009) shows that it does not exceed 33%, and so lags far behind every other Member State. The low connectivity naturally limits the uptake of all services, whether they be e-Government, e-Commerce or e-Health. Bulgaria adopted a Broadband Strategy in November 2009, but some key implementation measures are much more recent. Thus, it is not yet clear whether the strategy will significantly accelerate broadband deployment. In any case, given the very large gap, it will take several years of measures to close that gap. Mobile broadband is another gateway for access. However, additional prime quality spectrum for mobile operators is absent. On 28 October 2009, the European Commission adopted the Commission Recommendation 2009/848/CE to switch off analogue terrestrial TV and free up a significant amount of radio spectrum (the 790-862 MHz band) for mobile broadband by 2012. Bulgaria is lagging behind this schedule, and this delay risks slowing down the deployment of mobile broadband, in addition to the slow deployment of fixed broadband.

5. SUMMARY

The fiscal strategy as presented in the Convergence Programme should correct the excessive general government deficit in 2011. However, it is not entirely clear from the update how the fiscal targets will be reached in 2012-14. In addition, despite the gradually improving economic outlook and the uncertainties ensuing from the considerable recent macroeconomic volatility, the programme does not ensure a faster progress towards the achievement of the MTO. The Bulgarian economy is currently stabilising after a sharp adjustment in 2009-2010 which abruptly interrupted a period of strong economic growth and triggered an unwinding of some of the accumulated imbalances. Although recovery is being driven by a continued strong increase in exports underpinned by favourable developments in world trade and the replenishing of inventories, the Convergence Programme projection of economic growth over 2011-12 is based on a more favourable assumption of a larger contribution from domestic demand than that of the Commission services' forecast.

The Bulgarian National Reform Programme (NRP) identifies four priority areas covering youth competitiveness, the business environment, confidence in state institutions and infrastructure. In general, this focus coincides with the Commission's analysis of structural bottlenecks that continue to hamper long-term sustainable growth perspectives. These challenges have been building up in the Bulgarian economy for some time (poor infrastructure and lack of administrative capacity) and reform will require both a long term strategy and continued efforts. With wage growth having outpaced productivity developments in recent years, the competitive position of the economy could deteriorate. Opening up more opportunities for growth would be helped by reducing administrative burdens and creating a more favourable climate for the private sector to invest. The challenge of reducing poverty and social exclusion remains substantial, especially for the most vulnerable groups facing

multiple barriers, and measures to help people into jobs will be important.

STATISTICAL ANNEX

Table I. Macro economic indicators

	1995-1999	2000-2004	2005-2008	2009	2010	2011	2012
Core indicators							
GDP growth rate	-0.7	5.4	6.4	-5.5	0.2	2.8	3.7
Output gap ¹	-1.7	1.6	3.9	-3.5	-5.0	-4.2	-2.9
HICP (annual % change)	10.6	6.4	8.2	2.5	3.0	4.3	3.4
Domestic demand (annual % change) ²	1.2	7.6	8.9	-12.8	-4.6	2.5	3.6
Unemployment rate (% of labour force) ³	13.3	16.0	7.9	6.8	10.2	9.4	8.5
Gross fixed capital formation (% of GDP)	13.6	18.3	28.9	28.9	23.5	24.2	25.0
Gross national saving (% of GDP)	15.4	15.3	13.4	20.4	23.9	23.8	24.0
General Government (% of GDP)							
Net lending (+) or net borrowing (-)	-3.2	0.2	1.4	-4.7	-3.2	-2.7	-1.6
Gross debt	87.4	54.4	20.0	14.6	16.2	18.0	18.6
Net financial assets	n.a	7.1	8.6	6.8	n.a	n.a	n.a
Total revenue	37.2	40.0	39.3	36.0	34.5	34.7	35.0
Total expenditure	40.3	39.8	37.8	40.7	37.7	37.4	36.6
<i>of which: Interest</i>	9.7	3.0	1.2	0.8	0.6	0.8	0.9
Corporations (% of GDP)							
Net lending (+) or net borrowing (-)	1.1	4.4	-2.1	n.a	n.a	n.a	n.a
Net financial assets; non-financial corporations	n.a	-69.0	-153.7	-190.2	n.a	n.a	n.a
Net financial assets; financial corporations	n.a	0.1	-22.4	13.7	n.a	n.a	n.a
Gross capital formation	4.6	12.8	23.9	n.a	n.a	n.a	n.a
Gross operating surplus	6.7	22.8	29.1	n.a	n.a	n.a	n.a
Households and NPISH (% of GDP)							
Net lending (+) or net borrowing (-)	-1.0	-7.8	-16.1	n.a	n.a	n.a	n.a
Net financial assets	n.a	49.6	62.0	56.7	n.a	n.a	n.a
Gross wages and salaries	1.6	20.9	29.2	n.a	n.a	n.a	n.a
Net property income	6.8	0.4	0.2	n.a	n.a	n.a	n.a
Current transfers received	0.6	10.8	13.5	n.a	n.a	n.a	n.a
Gross saving	0.2	-6.8	-13.8	n.a	n.a	n.a	n.a
Rest of the world (% of GDP)							
Net lending (+) or net borrowing (-)	-0.7	-4.8	-19.3	-7.6	-0.3	-1.3	-1.8
Net financial assets	n.a	14.7	107.9	117.7	n.a	n.a	n.a
Net exports of goods and services	0.8	-8.9	-18.2	-8.8	-1.9	-2.4	-3.0
Net primary income from the rest of the world	-2.8	0.6	-3.6	-2.2	-2.6	-3.8	-3.8
Net capital transactions	0.0	0.2	0.1	1.4	0.7	0.7	0.8
Tradable sector	57.0	51.9	46.7	44.6	44.8	n.a	n.a
Non tradable sector	34.3	35.3	37.2	41.3	41.3	n.a	n.a
<i>of which: Building and construction sector</i>	3.9	4.0	6.0	7.3	7.0	n.a	n.a
Real effective exchange rate (index, 2000=100)	87.0	108.0	123.3	150.5	148.4	155.7	160.3
Terms of trade goods and services (index, 2000=100)	90.8	100.4	104.9	107.3	110.7	109.3	108.1
Market performance of exports (index, 2000=100)	128.5	113.8	124.2	139.4	147.5	152.5	155.7
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
	COM	CP	COM	CP	COM	CP	CP	CP
Real GDP (% change)	0.2	0.2	2.8	3.6	3.7	4.1	4.4	4.2
Private consumption (% change)	-1.2	-1.2	2.1	3.2	3.6	4.1	4.7	3.5
Gross fixed capital formation (% change)	-16.5	-16.5	4.9	5.6	5.8	6.5	7.5	7.6
Exports of goods and services (% change)	16.2	16.3	7.7	8.2	7.1	7.8	7.6	7.2
Imports of goods and services (% change)	4.5	4.5	7.0	7.8	6.8	8.2	8.5	7.3
<i>Contributions to real GDP growth:</i>								
- Final domestic demand	-5.7	-5.7	2.4	3.5	3.6	4.4	5.1	4.5
- Change in inventories	0.6	0.6	0.1	0.1	0.0	0.1	0.1	0.1
- Net exports	5.2	5.2	0.3	0.1	0.0	-0.4	-0.8	-0.3
Output gap ¹	-5.0	-5.4	-4.2	-4.2	-2.9	-2.8	-1.0	0.4
Employment (% change)	-5.9	-5.9	0.5	0.2	1.0	0.7	0.9	0.6
Unemployment rate (%)	10.2	3.4	9.4	-0.1	8.5	-0.4	-0.5	-0.3
Labour productivity (% change)	6.4	6.5	2.3	3.4	2.7	3.4	3.5	3.6
HICP inflation (%)	3.0	3.0	4.3	3.9	3.4	3.4	2.6	2.4
GDP deflator (% change)	3.0	3.0	3.1	3.5	2.5	2.8	2.5	2.2
Comp. of employees (per head, % change)	7.2	7.2	7.1	7.7	6.8	6.5	6.8	5.4
Net lending/borrowing vis-à-vis the rest of the world (% of GDP)	-0.3	-0.2	-1.3	-0.7	-1.8	-1.7	-2.1	-1.8
<p><u>Note:</u> ¹In percent of potential GDP, with potential GDP growth according to the programme as recalculated by Commission services.</p> <p><u>Source:</u> Commission services' spring 2011 forecasts (COM); Convergence programme (CP).</p>								

Table III. Composition of the budgetary adjustment

(% of GDP)	2010	2011		2012		2013	2014	Change: 2010-2014
	COM	COM	CP	COM	CP	CP	CP	CP
Revenue	34.5	34.7	34.6	35.0	35.3	35.4	33.8	-0.7
<i>of which:</i>								
- Taxes on production and imports	14.9	14.5	14.4	14.6	14.6	14.3	14.3	-0.6
- Current taxes on income, wealth, etc.	4.9	4.9	4.9	5.0	4.9	5.1	5.1	0.2
- Social contributions	7.0	7.3	7.3	7.2	7.1	7.0	7.1	0.1
- Other (residual)	7.7	8.0	8.0	8.3	8.7	9.0	7.3	-0.4
Expenditure	37.7	37.4	37.2	36.6	36.8	36.4	34.2	-3.5
<i>of which:</i>								
- Primary expenditure	37.1	36.6	36.4	35.7	35.9	35.3	33.3	-3.8
<i>of which:</i>								
Compensation of employees	9.4	8.8	8.6	8.6	8.3	8.0	7.9	-1.5
Intermediate consumption	6.2	6.2	5.7	6.0	5.5	5.2	4.8	-1.4
Social payments	14.3	13.9	13.6	13.2	12.8	12.3	12.2	-2.1
Subsidies	1.3	1.3	1.2	1.2	1.2	1.3	1.1	-0.2
Gross fixed capital formation	4.6	4.4	4.3	4.8	5.6	5.6	4.5	-0.1
Other (residual)	1.3	2.0	3.0	2.0	2.7	3.0	2.8	1.5
- Interest expenditure	0.6	0.8	0.8	0.9	0.9	1.1	0.9	0.3
General government balance (GGB)	-3.2	-2.7	-2.5	-1.6	-1.5	-1.0	-0.5	2.7
Primary balance	-2.6	-1.9	-1.7	-0.7	-0.6	0.0	0.4	3.0
One-off and other temporary measures	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.1
GGB excl. one-offs	-3.3	-2.7	-2.5	-1.6	-1.5	-1.0	-0.5	2.8
Output gap ²	-5.0	-4.2	-4.2	-2.9	-2.8	-1.0	0.4	5.4
Cyclically-adjusted balance ²	-1.4	-1.2	-1.1	-0.6	-0.6	-0.7	-0.6	0.8
Structural balance³	-1.3	-1.2	-1.1	-0.6	-0.6	-0.7	-0.6	0.9
<i>Change in structural balance</i>		0.1	0.2	0.6	0.5	-0.1	0.0	
Structural primary balance ³	-0.9	-0.4	-0.3	0.3	0.3	0.4	0.3	1.2
<i>Change in structural primary balance</i>		0.6	0.6	0.7	0.6	0.1	-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:								
<i>Convergence programme (CP); Commission services' spring 2011 forecasts (COM); Commission services' calculations</i>								

Table IV. Debt dynamics

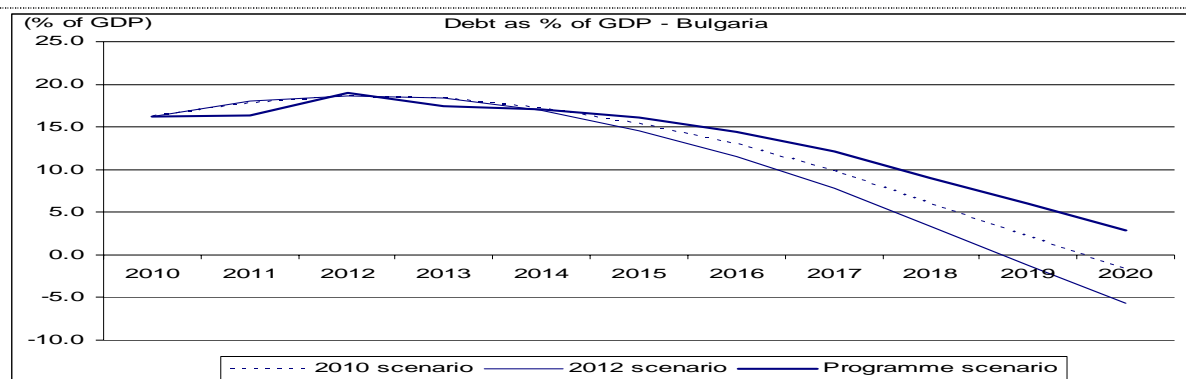
(% of GDP)	average 2005-09	2010	2011		2012		2013	2014
			COM	CP	COM	CP	CP	CP
Gross debt ratio¹	18.9	16.2	18.0	16.4	18.6	19.0	17.4	17.1
Change in the ratio	-4.5	1.6	1.8	0.2	0.6	2.6	-1.6	-0.3
<i>Contributions²:</i>								
1. Primary balance	-1.4	2.6	1.9	1.7	0.7	0.6	0.0	-0.4
2. “Snow-ball” effect	-1.4	0.2	-0.1	-0.3	-0.1	-0.1	-0.2	-0.1
<i>Of which:</i>								
Interest expenditure	1.2	0.6	0.8	0.8	0.9	0.9	1.0	0.9
Growth effect	-1.0	0.0	-0.4	-0.5	-0.6	-0.6	-0.8	-0.7
Inflation effect	-1.5	-0.4	-0.5	-0.5	-0.4	-0.4	-0.4	-0.4
3. Stock-flow adjustment	-1.7	-1.2	0.0	-1.2	0.0	2.2	-1.4	0.3
<i>Of which:</i>								
Cash/accruals diff.	-1.3	1.2		-1.2		3.9	-3.1	0.1
Acc. financial assets	-0.5	-2.7		0.1		-1.4	1.9	0.2
<i>Privatisation</i>	-1.0	-0.3		0.6		0.2	0.1	0.0
Val. effect & residual	0.1	0.3		0.0		0.0	0.0	0.0
Notes:								
¹ End of period.								
² The 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								
Source:								
<i>Convergence programme (CP); Commission services’ spring 2011 forecasts (COM); Commission services’ calculations</i>								

Table V. Long-term sustainability indicators

Bulgaria	Baseline scenario (2010)			Programme scenario		
	S1	S2		S1	S2	
Value	1.7	3.3		0.7	2.3	
of which:						
Initial budgetary position (IBP)	1.1	1.2		0.1	0.2	
Debt requirement in 2060 (DR)	-0.6	-		-0.6	-	
Long-term change in the primary balance (LTC)	1.1	2.1		1.1	2.1	
	2010	2015	2020	2010	2015	2020
Debt as % of GDP	16.2	15.3	-1.7	16.2	16.0	2.9

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



Source: Commission Services

Table VI. Financial market indicators

	2006	2007	2008	2009	2010
Total assets of the banking sector (% of GDP)	73.1	83.7	96.6	106.2	107.1
Share of assets of the five largest banks (% of total assets)	50.3	56.7	57.3	58.3	...
Foreign ownership of banking system (% of total assets)	77.2	81.6	83.4	83.7	...
Financial soundness indicators:					
- non-performing loans (% of total loans) ¹⁾	2.2	2.1	2.5	6.4	11.9
- capital adequacy ratio (%) ²⁾	14.5	13.8	14.9	17.0	17.5
- profitability - return on equity (%) ³⁾	25.0	24.8	23.1	10.2	7.9
Private credit growth (annual % change)	21.3	48.5	49.7	12.6	2.1
Residential property prices (y-o-y % change)					
Exposure to countries receiving/repaying official financial assistance (% of GDP) ⁴⁾
Private debt (% of GDP) ⁵⁾	45.1	61.7	72.6	76.2	74.6
Gross external debt (% of GDP)					
- Public	14.3	10.2	7.5	7.8	7.8
- Private	51.9	66.4	76.1	74.3	73.6
Long term interest rates spread versus Bund (basis points)*	42.1	32.3	139.3	399.3	326.2
Credit default swap spreads for sovereign securities (5-year)*	498.6	353.1	259.0
Notes:					
¹⁾ 2008-2009 figures include foreign bank branches.					
²⁾ The capital adequacy ratio is defined as total capital divided by risk weighted assets.					
³⁾ Net income to equity ratio. After extraordinary items and taxes. Tier 1 capital.					
⁴⁾ Covered countries are IE, EL, PT, RO, LV and HU.					
⁵⁾ Due to data gaps on debt securities in 2007, only the loans to GDP ratio is provided for this year.					
* Measured in basis points.					
<i>Source :</i>					
<i>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).</i>					

Table VII. Labour market and social indicators

	2005	2006	2007	2008	2009	2010
Overall employment rate (% of population aged 20 - 64)	61.9	65.1	68.4	70.7	68.8	65.4
Overall employment growth (% change from previous year)	2.7	3.3	3.2	2.6	-2.6	-5.9
Employment rate of women (% of female population aged 20 - 64)	57.1	60.4	63.5	65.4	64.0	61.7
Employment rate of men (% of male population aged 20 - 64)	66.8	69.9	73.4	76.1	73.8	69.1
Employment rate of older workers (% of population aged 55 - 64)	34.7	39.6	42.6	46.0	46.1	43.5
Part-time employment (% of total employment)	2.1	2.0	1.7	2.3	2.3	2.4
Fixed term employment (% of employees with a fixed term contract)	6.4	6.2	5.2	5.0	4.7	4.5
Overall unemployment rate (% of labour force)	10.1	9.0	6.9	5.6	6.8	10.2
Long-term unemployment (% of labour force)	6.0	5.0	4.1	2.9	3.0	4.8
Youth unemployment rate (% of youth labour force (15-24))	22.3	19.5	15.1	12.7	16.2	23.2
Youth NEET rate (% of population aged 15-24)	25.1	22.2	19.1	17.4	19.5	:
Early leavers from education and training (% of pop. 18-24 with at most lower sec. educ. and not in further education or training)	20.4	17.3	14.9	14.8	14.7	:
Tertiary educational attainment (% of population 30-34 having successfully completed tertiary education)	24.9	25.3	26.0	27.1	27.9	:
Labour productivity per person employed (EU-27 = 100 - based on PPS per employed person)	35.6	36.2	37.3	39.3	39.9	:
Labour productivity per hour worked (EU-15 = 100 - based on PPS per hour worked)	31.5	32.1	33.1	34.9	35.1	:
Nominal unit labour cost growth (% change on previous year)	5.6	3.1	9.3	12.5	12.7	0.8
Real unit labour cost growth (% change on previous year)	-1.7	-3.5	0.1	3.7	8.1	-2.1
<i>Source: Eurostat database (Labour Force Survey, National Accounts)</i>						

Table VII. Labour market and social indicators (continued)**Expenditure for social protection benefits**

Social protection benefits (% of GDP)	2004	2005	2006	2007	2008
Sickness/Health care	0.5	4.2	3.6	3.7	4.4
Invalidity	0.8	1.2	1.3	1.1	1.2
Old age and survivors	8.0	7.5	7.3	7.0	7.4
Family/Children	0.0	1.0	1.0	1.2	1.3
Unemployment	0.3	0.3	0.3	0.3	0.3
Housing and Social exclusion n.e.c.	0.0	0.4	0.3	0.3	0.3
Total	9.5	14.6	13.8	13.7	14.9
of which: Means tested benefits	0.0	1.0	0.8	0.7	0.7
<i>Source: Eurostat - ESSPROS</i>					

Social inclusion indicators

	2005	2006	2007	2008	2009
Risk-of-poverty or exclusion (% of total population)	:	61.3	60.7	44.8	46.2
Risk-of-poverty or exclusion of children (% of people aged 0-17)	:	61.0	60.8	44.2	47.3
Risk-of-poverty or exclusion of elderly (% of people aged 65+)	:	73.7	71.1	65.5	66.0
At-Risk-of-Poverty rate (% of total population)	:	18.4	22.0	21.4	21.8
Value of relative poverty threshold (single HH) - in PPS	:	1920	1980	2856	3456
Severe Material Deprivation (% of total population)	:	57.7	57.6	41.2	41.9
Share of people living in low work intensity households (% of people aged 0-59 living in households with low work intensity)	:	14.7	15.9	8.1	6.9
In-work at-risk-of poverty rate (% of persons employed)	:	5.5	5.9	7.6	7.5
<i>Source: Eurostat - EU-SILC</i>					

Table VIII. Product market performance and policy indicators

Performance indicators	2001-2005	2006	2007	2008	2009	2010
Labour productivity ¹ total economy (annual growth in %)	3.6	3.2	3.1	3.5	-0.7	6.5
Labour productivity ¹ in manufacturing (annual growth in %)	5.9	5.7	13.2	2.7	2.5	10.0
Labour productivity ¹ in electricity, gas, water (annual growth in %)	0.6	-5.2	n.a.	n.a.	n.a.	n.a.
Labour productivity ¹ in the construction sector (annual growth in %)	0.6	-8.2	-3.0	-7.4	-3.0	24.0
Patent intensity in manufacturing ² (patents of the EPO divided by gross value added of the sector)	0.8	0.6	0.1	n.a.	n.a.	n.a.
Policy indicators	2001-2005	2006	2007	2008	2009	2010
Enforcing contracts ³ (days)	n.a.	564	564	564	564	564
Time to start a business ³ (days)	n.a.	32	32	49	18	18
R&D expenditure (% of GDP)	0.5	0.5	0.5	0.5	0.5	n.a.
Tertiary educational attainment (% of 30-34 years old population)	24.1	25.3	26.0	27.1	27.9	n.a.
Total public expenditure on education (% of GDP)	4.2	4.2	4.1	4.6	n.a.	n.a.
	2003	2005	2006	2008	2009	2010
Product market regulation ⁴ , Overall (Index; 0=not regulated; 6=most regulated)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Product market regulation ⁴ , Retail (Index; 0=not regulated; 6=most regulated)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Product market regulation ⁴ , Network Industries ⁵ (Index; 0=not regulated; 6=most regulated)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Notes:						
¹ Labour productivity is defined as gross value added (in constant prices) divided by the number of persons employed.						
² Patent data refer to applications designated to the European Patent Office (EPO). They are counted according to the year in which they were filed at the EPO. They are broken down according to the inventor's place of residence, using fractional counting if multiple inventors or IPC classes are provided to avoid double counting.						
³ The methodologies, including the assumptions, of this indicator is presented in detail at the website http://www.doingbusiness.org/methodology .						
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.						
⁵ Aggregate ETCR.						
*figure for 2007.						
Source:						
Commission services, World Bank Doing Business (for enforcing contracts and time to start a business) and OECD (for the product market regulation indicators).						