SYSTEMATIC COUNTRY DIAGNOSTIC

Bulgaria’s Potential for Sustainable Growth and Shared Prosperity

July 29, 2015

Document of the World Bank
CURRENCY AND EQUIVALENT UNITS

Exchange Rate as of May 28, 2015

<table>
<thead>
<tr>
<th>Currency Unit</th>
<th>Bulgarian Lev</th>
</tr>
</thead>
<tbody>
<tr>
<td>US$ 1.00</td>
<td>BGN 1.795</td>
</tr>
</tbody>
</table>

Government Fiscal Year
January 1 – December 31

ACRONYMS AND ABBREVIATIONS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANS</td>
<td>Adjusted net savings</td>
</tr>
<tr>
<td>AROP</td>
<td>At-risk-of-poverty</td>
</tr>
<tr>
<td>BEEPS</td>
<td>Business Environment Enterprise Survey</td>
</tr>
<tr>
<td>BEH</td>
<td>Bulgarian Energy Holding</td>
</tr>
<tr>
<td>BGN</td>
<td>Bulgarian Lev</td>
</tr>
<tr>
<td>BLISS</td>
<td>Bulgarian Longitudinal Inclusive Society Survey</td>
</tr>
<tr>
<td>BNK</td>
<td>Bulgarian National Bank</td>
</tr>
<tr>
<td>BRR</td>
<td>Bank recovery and resolution</td>
</tr>
<tr>
<td>KTB</td>
<td>Corporate Commercial Bank</td>
</tr>
<tr>
<td>CVM</td>
<td>Cooperation and verification mechanism</td>
</tr>
<tr>
<td>DGS</td>
<td>Deposit guarantee schemes</td>
</tr>
<tr>
<td>DIF</td>
<td>Deposit Insurance Fund</td>
</tr>
<tr>
<td>ECA</td>
<td>Europe and Central Asia</td>
</tr>
<tr>
<td>EDP</td>
<td>Excessive deficit procedure</td>
</tr>
<tr>
<td>ESA</td>
<td>European System of Accounts</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>EU-SILC</td>
<td>European Union Survey on Income and Living Conditions</td>
</tr>
<tr>
<td>EWRC</td>
<td>Energy and Water Regulatory Committee</td>
</tr>
<tr>
<td>FDI</td>
<td>Foreign direct investment</td>
</tr>
<tr>
<td>FGD</td>
<td>Focus group discussions</td>
</tr>
<tr>
<td>FIB</td>
<td>First Investment Bank</td>
</tr>
<tr>
<td>GMI</td>
<td>Guaranteed minimum income</td>
</tr>
<tr>
<td>GNI</td>
<td>Gross national income</td>
</tr>
<tr>
<td>HEIs</td>
<td>Higher education institutions</td>
</tr>
<tr>
<td>ILO</td>
<td>International Labor Organization</td>
</tr>
<tr>
<td>ANS</td>
<td>Irrigation Systems Company</td>
</tr>
<tr>
<td>LLL</td>
<td>Life-long learning</td>
</tr>
<tr>
<td>LTC</td>
<td>Long term care</td>
</tr>
<tr>
<td>LWI</td>
<td>Low work intensity</td>
</tr>
<tr>
<td>NEET</td>
<td>Not in education, employment, or training</td>
</tr>
<tr>
<td>NEK</td>
<td>National Electricity Company</td>
</tr>
<tr>
<td>NGOs</td>
<td>Non-governmental organizations</td>
</tr>
<tr>
<td>NSI</td>
<td>National Statistical Institute</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>OOPs</td>
<td>Out-of-pocket payments</td>
</tr>
<tr>
<td>OP</td>
<td>Operational program</td>
</tr>
<tr>
<td>PAYG</td>
<td>Public pay-as-you-go</td>
</tr>
<tr>
<td>PES</td>
<td>Public Employment Service</td>
</tr>
<tr>
<td>PIRLS</td>
<td>Progress in International Reading Literacy Study</td>
</tr>
<tr>
<td>PISA</td>
<td>Programme for International Student Assessment</td>
</tr>
<tr>
<td>PPP</td>
<td>Purchasing power parity</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>Research and Development</td>
</tr>
<tr>
<td>RAMS</td>
<td>Road asset maintenance system</td>
</tr>
<tr>
<td>SCD</td>
<td>Systematic country diagnostic</td>
</tr>
<tr>
<td>SEWRC</td>
<td>State Energy and Water Regulatory Committee</td>
</tr>
<tr>
<td>SMD</td>
<td>Severe material deprivation</td>
</tr>
<tr>
<td>SMEs</td>
<td>Small and medium-sized enterprises</td>
</tr>
<tr>
<td>SOEs</td>
<td>State-owned enterprises</td>
</tr>
<tr>
<td>SSN</td>
<td>Social safety nets</td>
</tr>
<tr>
<td>ILO</td>
<td>World Health Organization</td>
</tr>
</tbody>
</table>

Vice President: Cyril E Muller
Country Director: Mamta Murthi
GP Director: Satu Kahkonen
Practice Manager: Miria Pigato/Ivailo Izvorski
Task Team Leader: Stella Ilieva
Acknowledgments

This document was prepared with the leadership and guidance of the Country Management Unit comprising Mamta Murthi, country director, ECCU5; Antony Thompson, country manager, ECCBG; Markus Repnik, former country manager, ECCBG; Ismail Radwan, country program coordinator, ECCU5; Allison Berg, former senior country officer, ECCU5; and Sylvia Stoynova, operations officer, ECCBG. The team benefited greatly from the support and guidance of Satu Kahkonen, director, GMFDR (former practice manager); Ivailo Izvorski, practice manager, GMFDR; and Miria Pigato, former practice manager, GMFDR.

The task team was led by Stella Ilieva, senior economist, GMFDR, who, together with Ron Hood, consultant, GMFDR, contributed to the context chapter. The paper draws on several background papers that were prepared for this purpose. The sections on progress in reducing poverty and boosting shared prosperity were drafted by Kenneth Simler, senior economist, GPVDR, and Alexandru Cojocaru, economist, GPVDR. Ana Maria Munoz Boudet, senior gender specialist, GPVDR, contributed to gender analysis. Pedro Rodriguez, lead economist, GMFDR; Doerte Doemeland, Lead Economist, GMFDR; and Theo Thomas, lead economist, GMFDR, provided advice on macroeconomic, fiscal, and structural issues. Christian Bodewig, program leader, ECCU5; Jean-François Marteau, program leader, ECCU5; Isfandyar Khan, program leader, ECCU5, provided strategic guidance to the team at every stage of the preparation of the report and coordinated contributions from the general practices. Governance challenges were analyzed by Elena Georgieva-Andonovska, consultant, GGODR, with guidance from David Bernstein, leader public sector specialist, GGODR. The analysis of the business environment and innovation was prepared by Evgeny Evgeniev, private sector development specialist, GTCDR, while the section on upgrading of skills was prepared by Plamen Danchev, education specialist, GEDDR. Toma Yanakiev, consultant, GWADR; and Rakesh Tripathi, senior transportation specialist, GTIDR, contributed to the transport infrastructure analyses focusing on railways and road sectors respectively. Labor market and social safety net analyses were prepared by Victoria Levin, economist, GSPDR, and Ulrich Hoerning, senior social protection economist, GSPDR. Pension issues were analyzed by Asta Zviniene, senior social protection specialist, GSPDR, and Miglena Abels, consultant, GSPDR. Agnes Couffinhal, senior economist, GHNDR, prepared the access to health and long-term care section. Elena Bondarenko, consultant, GMFDR; and Rachel Li Jiang, junior professional associate, GMFDR, provided analytical support for the macroeconomic and financial stability section. Valerie Morrca, social development specialist, GSURR, drafted the social stability section. Eolina Milova, senior operations officer, GENDR, Joaquin Toro, senior disaster risk management specialist, GSURR, and Thierry Davy, senior climate change specialist, GENDR contributed to the environment sustainability section, together with: Claudia Ines Vasquez Suarez, energy economist, GEEDR, who focused on the analysis of the energy sector; Wilfried Hundertmark, senior irrigation specialist, GWADR, who focused on irrigation; Michael
Jacobsen, lead water and sanitation specialist, GWADR, and Ivaylo Kolev, senior water and sanitation specialist, GWADR, who focused on water and sanitation issues. Input and comments from IFC colleagues Vladimir Mihailovski – country officer, CEUBU, and Kartick Kumar – strategy officer, CGEDR, were received and appreciated. Adela Delcheva, team assistant, ECCBG, and Nancy Davis-Cole, program assistant, GMFRD, provided valuable administrative and logistical support, and Anne Grant edited the report.

The team thanks the SCD peer reviewers for their helpful suggestions and insights: Prof. Dr. Vassil Tsanov, Institute of Economic Research, Bulgarian Academy of Sciences; Humberto Lopez, country director, LCC2C; Carolina Sanchez-Paramo, practice manager, GPVDR; Gallina Vincelette, program leader, ECCU4; Jorge Araujo, economic adviser, LCRVP; and Daniel Gros, director, Center for European Policy Studies, Brussels.
Executive Summary

1. After years of strong performance in the run-up to the European Union (EU) accession, Bulgaria’s growth has slowed down and poverty remains the highest in the EU. Bulgaria achieved the highest recorded growth rates between 2000-08 on the back of exceptionally high capital inflows, structural reforms, sound fiscal management and the prospects of EU accession. Employment boomed and poverty fell steeply. Since 2008 – the year of global economic crisis – economic growth has been sluggish, poverty on the rise and income gains of the bottom 40 percent meagre. Recently, labor markets and poverty have shown some signs of respite but new growth drivers and a sustained reform commitment will be needed for the current generation of Bulgarians to obtain EU living standards.

2. Bulgaria would need to implement comprehensive reforms to achieve faster, more inclusive and sustainable growth. Faster growth will require higher productivity growth which is a key determinant of long-term growth in any country. Real labor productivity in Bulgaria increased at an average of 2.8 percent per year between 2000 and 2014, slightly less than the median for the regional comparators of 3.3 percent but much faster than the EU average of 0.8 percent. Yet, productivity growth would need to accelerate to at least 4 percent annually for the next 25 years for Bulgaria to catch up with average EU income by 2040. Boosting productivity growth will require a better business climate, an improved education system and higher quality infrastructure. More inclusive growth could be achieved by improving the employability of all Bulgarians and enhancing the effectiveness and efficiency of public spending, especially related to health, long-term care and pensions. Sustainable growth entails maintaining macroeconomic and financial stability, social stability and reforms to better protect Bulgaria’s natural resources.

3. This Systematic Country Diagnostic (SCD) identifies three policy areas with the potential to transform the economy and achieve this objective: (1) strengthening the institutional and legal framework for good governance; (2) boosting the skills and employability of all Bulgarians; and (3) improving the effectiveness and efficiency of public spending. Drawing on an extensive body of previous and current work carried out by the World Bank, as well as local and foreign experts, the SCD discusses drivers and constraints to growth and uses an asset-based framework to understand how micro and macro-economic forces shape the income profile and dynamics of the bottom 40 percent of the population. The three transformational policy areas have been selected by using the following prioritization criteria: (1) the likely magnitude of the policy impact on the Bank’s twin goals of poverty reduction and shared prosperity; (2) the potential for providing at least a minimum standard of living for all; and (3) the potential for cross-cutting or complementary effects among the three growth dimensions: faster, inclusive, and sustainable. These three areas would also address the needs of the most vulnerable Bulgarians, namely: the high and growing numbers of poor Roma; the swelling proportion of elderly poor and pensioners relative to the working population; and the potential lost generation of youth who are not in school or in the labor force. The SCD is intended to inform the dialogue between the authorities and the World Bank Group on the Country Partnership Framework, which will in turn define areas where the Bank can support the government's efforts to reduce poverty and boost shared prosperity.

1 Regional comparators are: Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, and Slovenia.
Overview

4. **Bulgaria has made considerable progress in improving the living standard of all Bulgarians in recent decades.** It has made significant strides in converging to EU income levels as its GDP per capita in purchasing power standards (PPS) grew from 29 percent of the EU average in 1997 to 45 percent in 2013, largely driven by a surge in growth between 1997 and 2008. Convergence helped to lift 1.7 million Bulgarians out of poverty and raised the income level of the bottom 40 percent of the population by 1.4 percent. Still, the share of Bulgarians at risk of poverty remains high for an EU Member State. Income-enhancing opportunities are limited, particularly for the bottom 40 percent of the population and the 2008 global financial crisis put the brakes on Bulgaria’s foreign-financed growth spurt. Supported by prudent macro-fiscal management, Bulgaria showed resilience during the crisis with reduced imbalances and a sound public debt level. Yet, growth has been sluggish, income gains of the past are unlikely to return and sound macro-fiscal policies, though necessary, are not enough to reinvigorate Bulgaria’s growth.

5. **Bulgaria would need to strengthen its institutions and policies to achieve faster, more inclusive and sustainable growth that can reduce poverty and boost shared prosperity.** Frequent government changes in 2013-14 slowed down progress on structural reforms. The failure of the Corporate Commercial Bank (KTB) with associated liquidity pressures in the banking system in 2014 exposed weaknesses of checks and balances in Bulgaria’s banking system and contributed to an increase in public debt. The energy sector is in financial difficulties after years of mismanagement. Unemployment in Bulgaria remains high as firms struggle with government-induced uncertainties as a result of governance weaknesses and political instability in 2013-14. Since 2008 nearly 100,000 Bulgarians, mostly young people, have left the country in search of better opportunities. Outmigration and low fertility rates in the past have led to a rapidly aging population and will lead to a steep decline in Bulgaria’s working-age population, in the absence of policy change. This will pose challenges for growth, fiscal policy, public service provision and poverty reduction.

6. **This Systematic Country Diagnostic (SCD) identifies three policy areas with the potential to transform the economy and achieve this objective:** (1) strengthening the institutional and legal framework for good governance; (2) boosting the skills and employability of all Bulgarians; and (3) improving the effectiveness and efficiency of public spending. Drawing on an extensive body of previous and current work carried out by the Bank, as well as local and foreign experts, the SCD discusses drivers and constraints to growth and uses an asset-based framework to understand how micro and macro-economic forces shape the income profile and dynamics of the bottom 40 percent of the population. The three transformational policy areas have been selected by using the following prioritization criteria: (1) the likely magnitude of the policy impact on the World Bank’s twin goals of poverty reduction and shared prosperity; (2) the potential for providing at least a minimum standard of

---

2 Estimated as the proportion of the population living on less than US$5 per person a day (PPP).
3 Shared prosperity refers to the growth rate of the household incomes of the poorest 40 percent of Bulgarians.
4 According to NSI demographic statistics, the gross outward migration flow was close to 100,000 during 2008-2013, representing nearly 3 percent of the labor force.
5 Employability is the availability of a set of cognitive and socio-emotional skills that make people more likely to be employed.
living for all (e.g. basic education, health, sanitation, safety, food security); and (3) the potential for cross-cutting or complementary effects among the three growth dimensions: faster, inclusive and sustainable. These three areas would also address the needs of the most vulnerable Bulgarians, namely: the high and growing numbers of poor Roma; the swelling proportion of elderly poor and pensioners relative to the working population; and the potential lost generation of youth who are not in school or in the labor force. The SCD is intended to inform the dialogue between the authorities and the World Bank Group on the Country Partnership Framework, which will in turn define areas where the Bank can support the government's efforts to reduce poverty and boost shared prosperity.

Looking Back: Bulgaria’s Challenging Transition

7. Bulgaria went through a protracted transition with booms and busts. During the 1990s, delays in the implementation of structural reforms culminated in a severe economic crisis in 1996-97. Suffering from hyperinflation and a banking crisis, the government established a Currency Board Arrangement in 1997, which played a fundamental role in stabilizing the economy and is still in place. The Government also reduced public debt and liberalized markets, which in tandem with the expectation of EU accession, unleashed a decade of exceptionally high growth.

8. Between 2000 and 2008, Bulgaria achieved historically high growth rates and significant gains in poverty reduction, supported by a comprehensive pre-accession reform agenda and a favorable external environment. Efforts to advance structural reforms, prudent fiscal management and the prospects of EU accession helped attract exceptionally large foreign capital inflows. GDP per capita rose by an average of 6.6 percent per year, the highest growth on record, and employment surged. Nearly 600,000 jobs were created (17 percent of the labor force), mostly in trade, transport, tourism, construction, industry, and real estate and were the sectors that received the largest share of foreign direct investment (FDI). Because they mainly employed low-skilled labor, they boosted the labor income of the bottom 40 percent of the population, which increased by 1.4 percent during this period. Absolute poverty fell substantially, from 37 percent of the population in 2001 to 16 percent in 2008.

9. Since 2008, economic growth has remained sluggish, poverty has been on the rise and income gains of the bottom 40 have been weak. Between 2008 and 2014 annual real growth in per capita income slowed to just 1.3 percent as annual real growth fell by 5 percent in 2009 and has not surpassed 2 percent since. About 400,000 Bulgarians lost their jobs, mostly in industry, construction, and agriculture. Unemployment more than doubled nationwide from 5.6 percent in 2008 to 13 percent in 2013, undoing some of the pre-crisis gains. It reached almost 50 percent among workers with only primary education. As a result, the poverty rate rose from 16.1 percent in 2008 to 18.5 percent by 2012. The income of the bottom 40 percent grew at a mere 1.4 percent between 2007 and 2011, this was weak compared to other countries, but significantly higher than the income growth of the upper 60 percent. The share of Bulgarians at risk of poverty and social exclusion increased from 44.8 percent in 2008 to 48 percent in 2013, which implies that 3.5 million out of 7.3 million Bulgarians are still at risk of poverty or social exclusion (before social transfers), this is the largest share in the EU. Labor

---

6 NSI data according to ESA2010.
7 Estimated as the proportion of the population living on less than US$5 per person a day (PPP).
8 World Bank data estimated on the basis of EU-SILC 2007-11.
9 Eurostat data on the basis of EU-SILC.
Markets and poverty indicators have recently witnessed some signs of recovery. It will take a shift towards growth-enhancing and poverty-friendly policies as well as sustained efforts to build strong institutions that protect the rights of all Bulgarians and to put Bulgaria on a higher growth trajectory.

10. **Fiscal policy – Bulgaria’s key macro-management tool under the currency board arrangement – has been prudent but could be used more effectively to promote growth and help the poor.** A determined and deep fiscal adjustment immediately after the 1997 crisis, followed by a prudent fiscal policy was one of the main features of Bulgaria’s post-1997 macroeconomic environment. Bulgaria managed to reduce its public debt substantially from nearly 100 percent of GDP in 1997 to 14 percent by 2009, the second-lowest in the EU. This reduced large government interest spending that squeezed other spending and made Bulgaria more resilient to macroeconomic shocks. While macroeconomic stability is a sine qua non for growth, it is not enough to ensure sustained high growth rates. Improving the effectiveness and efficiency of public spending will be important for accelerating Bulgaria’s growth. Since 2008, growth-enhancing public expenditures have either grown by negligible amounts (e.g., education) or have declined (e.g., on research and development [R&D]). Public investment, which can support short and long-term growth if well-managed, also declined between 2008 and 2013 even though sizable EU funding was available. Spending on social assistance is not performing fully its function of protecting the poorest as spending has shifted toward programs that in part benefit the top 60 percent. At the same time, stalled reforms are leading to ever increasing health and pension demands on public resources. Large support to the banking sector, triggered by weaknesses in governance, led to a sharp increase in public debt in 2014. The fiscal deficit also rose sharply. In order to correct the high deficit, spending will need to be restructured to increase efficiency and effectiveness; this will have a greater impact than across-the-board cuts.

11. **Governance challenges have undermined Bulgaria’s progress with respect to growth and poverty reduction.** A country’s institutional and legal infrastructure that protects property rights, the rule of law and prevents abuse by governments, is a key determinant of faster, inclusive and sustainable growth. Despite some progress, Bulgaria has consistently underperformed almost all EU countries on governance indicators. The gap with the rest of the EU is most pronounced along key dimensions, such as the rule of law (quality of contract enforcement, property rights, the police, and the courts and the likelihood of crime and violence); control of corruption (the extent to which public power is exercised for private gain, including “capture” of the state by elites and private interests); and government effectiveness (the quality of public services, of the civil service and its degree of independence from political pressures, and of policy formulation and implementation; and the credibility of government commitment to such policies). Weaknesses in governance affect growth and shared prosperity in many ways. There is not always level playing field for market participants; economic efficiency is low in terms of absorption of EU funds for much needed investment, and in terms of the energy, road and railway sectors. Public services are often of insufficient quality and many poor people suffer from limited access to services such as health care, education, pensions, and social safety nets (SSNs). In addition, the recent need for government support to the banking sector, enabled by weaknesses in supervision, highlights heightened risks to macroeconomic stability; Bulgaria’s social stability is also at risk as demonstrated by a general lack of trust in institutions and minimal support for reforms. Such challenges to governance

---

10 Worldwide Governance Indicators. See Chapter 1. Context, Governance Challenges for more information on the indicators.
feed on and reinforce the political instability that has resulted in five governments in just two years.

12. **Progress in increasing the income of the bottom 40 percent has been limited by their lack of human capital, employability and financial assets.** Between 2007 and 2011, the annual income of the bottom 40 percent of the population increased by 1.4 percent - faster than the increase of both the average Bulgarian and the top 60 percent. However, it remained below the rates of regional comparator countries and far below what is needed to make meaningful progress on reducing poverty. The level, accumulation, and intensity of use of assets that people own as well as any return on these assets, determine people’s ability to earn an income and thus to escape poverty. Such assets include: human capital, physical or financial assets. In Bulgaria, the low income of the bottom 40 percent of the population reflects shortages in human capital, lack of employment opportunities and low savings among the elderly. The share of potential breadwinners in that group of households is the lowest in the EU because nearly half of household members are elderly. Among working age adults, nearly half of the bottom 40 percent of the population has not completed secondary education - significantly more than elsewhere in the EU - and thus have limited employment opportunities. Since 2008, finding a job has been especially difficult for low-skilled workers so that nearly half of those of working age in the bottom 40 percent of the population are either unemployed or outside the labor force. Those who do work tend to be under-employed and in low-wage occupations. With limited employment opportunities, most of the relative gains in income growth between 2007 and 2011 came from pensions.

13. **Inequality in human capital and employment opportunities has persistent ethnic, gender, and age dimensions.** According to the 2011 census, the Roma represent 4.8 percent of the Bulgarian population and the Turkish minority account for 8.8 percent. Since both have particularly low human capital and employment prospects, they are overrepresented in the bottom 40 percent of the population. About 70 percent of ethnic Turks and 93 percent of Roma have not completed upper secondary education, compared to 30 percent for ethnic Bulgarians. Nearly 25 percent of Roma children aged 7–15 have never attended school, compared to 12 percent of ethnic Turks and 6 percent of ethnic Bulgarians. According to the Bulgarian Longitudinal Inclusive Society Survey (BLISS), labor market activity rates of Roma women, and to a lesser extent for women from the Turkish minority, are significantly lower than those of other women in Bulgaria. Unemployment and informality are much higher for Roma than for non-Roma, and Roma make up 15 percent of all long-term unemployed in Bulgaria – three times their representation in the population. Poverty is higher for women, especially Roma women, than for men, and elderly women are most vulnerable. Children in Bulgaria, particularly in Roma families, also face a higher risk of poverty than the working age population.

**Looking Ahead: The Need to Tap Growth Drivers**

14. **In order to achieve faster, more inclusive and sustainable growth, Bulgaria would need to tap several growth drivers.** First, it will need to boost productivity growth. Productivity growth is a key determinant of long-term growth in any country. Real labor productivity\(^\text{11}\) in Bulgaria increased at an average of 2.8 percent per year between 2000 and

---

\(^{11}\) Based on gross value added per employed, estimated on the basis of NSI ESA2010 data.
2014, slightly less than the median of 3.3 percent for the regional comparators\textsuperscript{12} but much faster than the EU average of 0.8 percent. Yet, productivity growth would need to accelerate to at least 4 percent annually for the next 25 years for Bulgaria to catch up with average EU income by 2040. Convergence could be achieved at least a decade earlier than this if productivity were to grow at 5 percent a year. Maintaining such high productivity growth is possible, as Romania and Latvia demonstrated in 2000–14, but would be challenging to sustain over a longer period of time. Second, Bulgaria would need to improve the employability of all Bulgarians. Labor force participation of several sub-groups of Bulgarians is low (middle-aged unemployed; low-educated rural long-term unemployed; single men who are not in education, employment, or training (NEET); and young stay-at-home mothers). Activating these groups would support growth and poverty reduction. Finally, Bulgaria would need to improve the effectiveness and efficiency of public services.

15. **Higher productivity would not only accelerate growth but could also mitigate the economic impact of demographic change by increasing labor demand, raising wages and reducing emigration.** Within only three decades, Bulgaria has become the third oldest country in Europe. An aging population and low fertility rates are projected to lead to a steep decline in the working age population. In fact, the UN projects that Bulgaria’s working age population will decline by 40 percent between 2010 and 2050. Demographic change is already weakening growth, and the situation is likely to worsen as fewer workers are available to support a larger number of retirees. Simulations suggest that as the labor force shrinks, annual GDP growth would slow to 1.2 percent by 2030 and drop further to 0.7 percent by 2050 (World Bank 2013n). Productivity growth could help slow-down or possibly even reverse migration flows by increasing labor demand and raising wages.

16. **Bulgaria needs a broad range of reforms to remove constraints to productivity growth.** Productivity-enhancing reforms center on three areas for improvement: i) business environment, including: a review to simplify regulation and make it more transparent; restoration of the independence and effectiveness of electricity and other regulators; standardization of local government procedures; reform of the court system to improve appointment procedures, reduce case manipulations, and address widespread perceptions of bribe-taking and judicial abuse; and establish a high-level public body to be responsible for coordinating policy in innovation, research, and human capital innovation; ii) skills to equip Bulgaria’s workforce with the capacity to take advantage of new and more productivity jobs and to innovate; and iii) infrastructure to boost competitiveness and integration into European markets.

17. **Improving the employability of all Bulgarians will be important not only for faster but also for more inclusive growth.** A significant share of Bulgaria’s population is currently excluded from the labor market, as growth is slowing down and poverty is rising. In the bottom 40 percent of the population there are significant and persistent enclaves of people who suffer long-term, even multi-generational, social and economic exclusion. Excluding people from economic opportunities is economically and socially unaffordable. Recent portraits of labor market exclusion (World Bank 2014i) identified four clusters of the population whose activation needs are high because their poverty is worse but who have relatively high activation potential in terms of age, skills, location, and motivation for entering the labor market. The clusters are middle-aged unemployed; low-educated rural long-term unemployed; single men who are NEET; and young stay-at-home mothers. The situation of the Roma merits special

\textsuperscript{12} Excluding Croatia, for which data are lacking.
attention because they will represent an important part of the future labor force, yet their educational attainment and formal work experience are limited which undermines their employment chances. Skills-focused policies to activate these groups will expand their options to improve their standards of living and to reduce reliance on social assistance. Bulgaria’s education system is highly inequitable, with poorer outcomes for children in the bottom 40 percent of the population. Reforms to general and vocational schools are needed to ensure that the next generation has the right cognitive and socio-emotional foundation skills. Improvements in higher education will also be important to increase R&D.

18. **Improving the efficiency and effectiveness of public services, such as health, LTC services and pensions is also important for inclusive growth.** As Bulgaria’s population ages, an efficient provision of public services on health, long-term care (LTC), and pensions will become increasingly important. In the absence of reforms, increasing demand for age-related public services is likely to lead to substantial increases in public debt and threaten the sustainability of public finances. Access to healthcare is limited for the bottom 40 percent of households because of high out-of-pocket payments for health services. LTC services are prohibitively expensive for poorer Bulgarians who have to rely on family members to take care of them. The reach of social assistance and transfers needs to be better targeted: the coverage and adequacy of the social safety nets (SSN) is limited, and 44 percent of the most common social benefits, the monthly child allowance, go to the top 60 percent of the population. Coverage of the pension system is not only poor but is expected to worsen as the population ages: by 2075, 50 percent of pensioners will either get only the minimum pension or not be covered at all, which means that substantial transfers will be required from general revenue.

19. **There are macroeconomic, social, and environmental risks to the sustainability of stronger and more inclusive growth.** The currency board, and sound fiscal and financial policies have kept the economy stable, but macroeconomic risks have recently increased. The fiscal position in 2014 deteriorated because of slow economic growth and the building up of contingent liabilities. The main culprits were: (1) the banking sector when three banks were subject to liquidity pressures in June 2014 requiring a budget outlay of nearly 2.9 percent of GDP\(^\text{13}\) (state aid for one bank and government loan to the Deposit Insurance Fund); and (2) the worsening of the financial condition of state-owned enterprises (SOEs), especially in the power sector. Renewed vigor in advancing structural reforms is needed to address these issues, but also to enhance the productive capacity of the economy. Sluggish economic recovery and little progress in addressing governance issues have led to a vicious circle of high political instability and low support for important reforms. Only renewed reform efforts with transparency and accountability for the results achieved can mitigate these risks. Mitigating environmental risks is also important. Significant investments are needed to ensure that Bulgaria exploits its natural resources in a sustainable manner. This will require better compliance with EU directives, for example on water and sanitation, and more efficient and sustainable use of natural resources, including by addressing regulatory and governance issues.

**A Long Term Vision and Transformational Policies**

20. **Consensus is needed on a long-term vision for Bulgaria’s economic and social development and on strategies to achieve it.** Action is needed on many fronts to narrow the gap with the EU in terms of both living standards and quality of institutions. Based on a qualitative analysis, benchmarking Bulgaria with regional comparators from the EU, and

\(^{13}\) According to data from the Ministry of Finance.
consultations with country team experts, three to four policy directions/opportunities have been identified for each of the policy areas within the three dimensions of growth (faster, more inclusive and more sustainable growth) and on the basis of qualitative rather than quantitative assessment of their impact on the twin goals. These policy directions/opportunities were then narrowed down to three transformational policy areas based on the following criteria: (1) the likely magnitude of the policy impact on the Bank’s twin goals; (2) the potential for providing at least a minimum standard of living for all; and (3) the potential for cross-cutting or complementary effects among several dimensions of growth (faster, inclusive, and sustainable).

21. **Three transformational areas have been identified to be sine qua non for faster, more inclusive, and more sustainable growth.** Extensive analytical work of World Bank and non-World Bank experts suggests that sustained progress in three transformational areas is required for Bulgaria to achieve faster, more inclusive, and sustainable growth. All three areas have a substantial impact on the entire population, including on the bottom 40 percent of the population and would ensure basic minimum living standards for all. They deal with actions and policies that require a sustained reformed commitment. These three areas include:

- **Strengthening the institutional and legal framework for good governance.** Institutional weaknesses, particularly the lack of formulating and consistently implementing medium-term policies, have undermined Bulgaria’s economic progress and improvements in shared prosperity. This is caused by depressing productivity growth, reducing the efficiency of public services and threatening macro-economic stability. Sustained and comprehensive reforms in these three areas are likely to have a transformational impact on the Bulgarian economy: (1) modernizing public administration and management of public investment to enhance the effectiveness, transparency, and accountability of the conduct of public policy and to accelerate absorption of EU funds; (2) improving the functioning of the court system; and (3) strengthening governance of SOEs in energy and railways and state regulatory bodies (energy, bank and non-bank supervision).

- **Boosting the skills and employability of all Bulgarians.** Fewer workers and a rising dependency ratio mean that workers of all ages and ethnic groups must have the right cognitive, socio-emotional, and technical skills to generate higher incomes. Workers who have the right skills will be more productive and employable and are more likely to innovate. More efficient labor market activation policies will make it easier for the poorer segments of the population to find jobs and thus broaden the inclusiveness of growth. Since Bulgaria has one of the most inequitable education systems in the EU, reforms are necessary to expand opportunities for the bottom 40 percent of the population. Boosting skills will entail policies to: (1) expand early childhood development programs to improve schooling outcomes, which is especially critical for the poor; (2) improve quality of and access to primary and secondary education; (3) strengthen the governance of higher education to enhance its quality and relevance; and (4) expand adult education and continuing training, particularly for groups with the greatest needs—the low-skilled, marginalized groups, and those with the least formal education and the greatest literacy and numeracy problems.

- **Making public spending more effective and efficient.** Improving public spending will be important for boosting Bulgaria’s growth and improving social outcomes. In the
context of an aging population, spending on pensions, health and LTC is critical to ensure more inclusive and sustainable growth. Pensions already provide incomes for a large share of the bottom 40 percent of the population and the number of pensioners is likely to increase rapidly in the coming years as Bulgaria’s baby-boomers retire. The quality of and access to health and LTC is critical to ensure broader participation of the bottom 40 percent in the labor market, either because health problems prevent them from working productively or they have to take care of family members. With current demographic projections, pension, health, and long-term care costs are expected to rise significantly in the absence of reforms. Structural reforms will be needed to ensure that costs are sustainable and that access to services remain equitable. Unless contained, these costs would reduce the fiscal space for productivity-enhancing spending. Proposed reforms to make the pension system, health and long-term care more inclusive, sustainable, and supportive of growth include: (1) improving the fiscal sustainability and equity of the pension system by introducing bold parametric reforms related to the retirement age and the introduction of a universal pension financed from general revenues; (2) optimizing the hospital system and medication policy to stop the drain it is having on resources and to ensure better access to higher-quality care; (3) building up alternatives to hospital care and aligning incentives to ensure patients are treated at the right level of care so that the burden of chronic diseases is better and more efficiently managed.
<table>
<thead>
<tr>
<th>Dimension of growth</th>
<th>Policy areas</th>
<th>Proposed policy options/opportunities</th>
<th>Link with transformational policy areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faster growth</td>
<td>Regulation and innovation</td>
<td>Set up a Better Regulation Unit in the Council of Ministers. Enhance the effectiveness of the judiciary. Enhance the effectiveness of key regulatory bodies, such as the EWRC. Reduce municipal administrative procedures. Establish a high-level public body to be responsible for coordinating policy in innovation, research, and human capital.</td>
<td>Strengthening the legal and institutional framework for good governance.</td>
</tr>
<tr>
<td>Skills</td>
<td>Postpone ability-based tracking of students into profiled, general, and vocational tracks until compulsory schooling ends, Improve the quality and effectiveness of teacher policy. Strengthen governance of higher schools. Expand LLL opportunities.</td>
<td>Boosting skills and employability of all Bulgarians.</td>
<td>Making public spending more effective.</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>Invest in maintenance, rehabilitation, and completion of the EU roads network and road safety. Strengthen governance of roads and railways. Optimize the rail network.</td>
<td>Strengthening the legal and institutional framework for good governance.</td>
<td>Making public spending more effective.</td>
</tr>
<tr>
<td>Inclusive growth</td>
<td>Mobility and economic participation</td>
<td>Customize labor market policies to specific groups of jobless. Invest more in the coverage and quality of active labor market policies. Expand early childhood development programs and provide accessible and affordable child care, particularly for marginalized groups. Improve incentives for maternity leave.</td>
<td>Making public spending more effective.</td>
</tr>
<tr>
<td>Health and long-term care</td>
<td>Reorganize the hospital system. Strengthen primary and emergency care as alternatives to hospital-based care. Make purchasing medicines more efficient. Emphasize community-based LTC services – day care centers, home-based services.</td>
<td>Strengthening the legal and institutional framework for good governance.</td>
<td>Making public spending more effective.</td>
</tr>
<tr>
<td>Social safety nets</td>
<td>Relax GMI eligibility criteria and increase benefits. Reintroduce the in-work benefit in the GMI scheme. More closely link social assistance offices and local public employment services.</td>
<td>Strengthening the legal and institutional framework for good governance.</td>
<td>Making public spending more effective.</td>
</tr>
</tbody>
</table>
Table 1. Proposed Policy Options for Faster, Inclusive, and Sustainable Growth and Links with Transformational Policy Areas (continued)

<table>
<thead>
<tr>
<th>Dimension of growth</th>
<th>Policy areas</th>
<th>Proposed policy options</th>
<th>Link with transformational policy areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable growth</td>
<td></td>
<td>Strengthen confidence in the banking sector and the effectiveness of banking supervision.</td>
<td>Strengthening the legal and institutional framework for good governance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strengthen the fiscal position in the medium term.</td>
<td>Making public spending more effective</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Improve the management of public spending.</td>
<td>Making public spending more effective</td>
</tr>
<tr>
<td>Macroeconomic stability</td>
<td></td>
<td>Strengthen the financial performance of SOEs.</td>
<td>Strengthening the legal and institutional framework for good governance</td>
</tr>
<tr>
<td></td>
<td>Social stability</td>
<td>Raise political attention to social inclusion.</td>
<td>Strengthening the legal and institutional framework for good governance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Increase transparency and accountability of government and service providers.</td>
<td>Strengthening the legal and institutional framework for good governance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Enhance citizen engagement.</td>
<td>Strengthening the legal and institutional framework for good governance</td>
</tr>
<tr>
<td>Environment</td>
<td></td>
<td>Invest in and conduct mitigation and adaptation measures.</td>
<td>Strengthening the legal and institutional framework for good governance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Beef up environmental governance to ensure environmental regulations are enforced.</td>
<td>Strengthening the legal and institutional framework for good governance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ensure affordable and sustainable financing for the water sector (including water supply and sanitation and irrigation).</td>
<td>Strengthening the legal and institutional framework for good governance</td>
</tr>
</tbody>
</table>

22. **Some reforms, such as strengthening the stability of the banking system and strengthening the energy regulator, are urgent.** They are necessary to rebuild confidence and reinvigorate growth in the short term. The Government has started tackling some of them. The deposit insurance law was amended to harmonize better with the Directive 2014/49/EC on Deposit Guarantee Schemes while a bank recovery and resolution framework is currently being developed to make it consistent with the relevant EU directive. First steps have also been taken to strengthen the energy and water regulator. These include: (1) increased number and enhanced modus operandi of commissioners to ensure more effective and better informed regulation; (2) the commissioners are now elected by Parliament (instead of the Council of Ministers) which increases the independence of the regulator; and (3) most of regulator meetings are now open to the public which enhances the transparency of decision-making.

23. **Other reforms have a medium- to long-term horizon but their implementation will need to start without delay.** Making progress in improving the transformational policy areas will require a sustained reform commitment and it may take years for the reform efforts to fully bear fruit. Many of these reforms have already been initiated with a number of measures included in the recently adopted Government Program (Republic of Bulgaria, 2014a), the strategic programming documents for EU funds management, or in the Updated Judiciary Strategy, which was approved by Parliament. Moreover, as many of proposed reforms are difficult, building a national consensus will be important.
Introduction

24. After a painful transition during a large part of the 1990s, which was followed by exceptionally high growth, Bulgaria joined the EU in 2007. Bulgaria’s transition from socialism resulted in a severe banking crisis in 1997 which catalyzed transition reforms. To stabilize the economy, the government introduced broad based measures to support price and market liberalization and implemented a currency board. Fueled by large inflows of external capital and the prospects of accession to the EU, Bulgaria’s per capita GDP improved significantly in the 2000s, reaching $6,977 by 2013, having risen from 28 percent of the EU average (PPS) in 2000 to 45 percent in 2013. However, after 2008 as growth momentum slackened and capital inflows dried up, reforms were not resumed. The pace of convergence with EU living standards has stalled since 2008 and Bulgaria continued to remain the poorest EU country.

25. Though rapid growth in 2000-08 reduced poverty and improved shared prosperity, the share of the population living in poverty remains staggeringly high and lack of job opportunities encourages the young to leave the country. Before the 2008 financial crisis, growth helped lift a significant number of people out of poverty, but progress on reducing poverty has since stalled. Eight years into EU accession, nearly half of all Bulgarians (3.5 million out of 7.3 million) are at risk of poverty or social exclusion, the highest share in the EU.14 Although the income of the bottom 40 percent of the population has increased, lack of opportunities—partly related to a high perception of state capture and weak labor demand—have prompted nearly 100,000 Bulgarians, mostly young people, to emigrate in the last seven years alone. This has accelerated the aging and shrinking of Bulgaria’s population: Bulgaria has become the third oldest country in Europe; between 2000 and 2013 its population declined by close to a million.

26. Since 2008, Bulgaria’s growth has slowed down, gains in poverty reduction declined and risks to the sustainability of growth increased. Since 2008, economic growth has slowed drastically, averaging only 1.3 percent in per capita terms between 2008 and 2014. Faster growth will be required to accelerate convergence, reduce or even reverse migration and raise the welfare of the bottom 40 percent of the population. In fact, Bulgaria’s slow growth period has gone hand in hand with an increase in poverty from 16.1 percent in 2008 to 18.5 percent in 2012. Macroeconomic, social and environmental risks to the sustainability of strong and inclusive growth have risen.

27. The objective of this Bulgaria SCD is to identify constraints and opportunities for Bulgaria to achieve faster, more inclusive, and more sustainable growth. An asset-based approach15 is used to better understand how micro and macro-economic conditions affect the capacity of Bulgarians to generate income and shape poverty dynamics and influence the evolution of income among the bottom 40 percent of the population. The SCD argues that any strategy for achieving the World Bank’s twin goals in Bulgaria would need to rest on three

---

14 The Europe 2020 Strategy defines “risk of poverty or social exclusion” using an indicator comprising risk of (relative) monetary poverty, severe material deprivation, and low work intensity (see Box 1.1).
15 An asset-based approach elaborated in Shared Prosperity: Paving the Way in Europe and Central Asia (Bussolo and Lopez-Calva, 2014) provides a framework for analyzing how micro and macro-economic characteristics affect poverty and shared prosperity. The key idea of the approach is that the level, accumulation, intensity of use of and return on people’s assets in terms of human, physical, financial, natural and social capital, influences their capacity to generate income and escape poverty.
dimensions: faster growth, more inclusive growth, and more sustainable growth, which are mutually reinforcing. The analysis identifies possible constraints and proposes policy directions to achieve each of them. The SCD draws on an extensive body of past and current work and prioritizes its recommendations by applying filters, such as: (1) the likely magnitude of the policy impact on the twin goals; (2) the potential for supporting a basic minimum standard of living for all; and (3) the potential for cross-cutting or complementary effects to achieve multiple dimensions of growth (faster, inclusive, sustainable). This SCD is also intended to inform the next Country Partnership Framework, which, in close collaboration with the government, will define the areas of World Bank Group engagement.

28. The SCD shows that the pathways for achieving the World Bank’s twin goals are in line with several reforms outlined in Bulgaria’s 2020 national reform program, which is designed to improve living standards and reduce poverty and social exclusion. Similar to other EU countries, Bulgaria has committed to pave the way to a smart, sustainable and inclusive economy with the objective of delivering high levels of productivity, employment, and social cohesion. To reach this objective, Bulgaria has agreed to achieving five headline targets in the areas of employment, R&D, climate change and energy, education, and poverty reduction to be reached by 2020. While there are methodological and conceptual differences in the definitions of World Bank goals and the Europe 2020 indicators of poverty and shared prosperity, the pathways to achieve both are similar. Bulgaria committed to reducing the number of people at risk of relative monetary poverty by 260,000 between 2008 and 2020 in its Europe 2020 strategy. Most of the reduction is expected to take place in groups that are currently at the highest risk of poverty or social exclusion: Roma, children, the unemployed, the working poor, and the elderly. Progress so far has been mixed. The total number of people living in relative monetary poverty declined by 73,300 in 2011 compared to 2008, but the number of children grew by 17,500.

29. The report is structured as follows: Chapter 1 sets the context by exploring Bulgaria’s previous progress in reducing poverty and boosting shared prosperity, and how growth and governance challenges have affected progress. It also identifies the need for new sources of growth. The next three chapters examine aspects of the new sources of growth: Chapter 2 looks at opportunities for accelerating growth by improving the business environment, upgrading skills, and enhancing transport infrastructure. Chapter 3 covers opportunities for achieving more inclusive growth by increasing mobility and economic participation of the bottom 40 percent of the population and reforming health and long-term care (LTC), social safety nets (SSNs), and the pension system. Chapter 4 looks at the sustainability of the new model of growth and shared prosperity in terms of macroeconomic and social stability and environmental sustainability. Chapter 5 then identifies policies for the tapping new growth drivers and opportunities for transformational change. The annexes discuss proposed policy directions and consultations with government and non-government agencies on the main findings of the SCD.

---

16 Persons at risk of poverty are those with an equalized disposable income below the risk-of-poverty threshold, which is a relative monetary line set at 60 percent of equivalent national median disposable income after social transfers.

1. Context

Progress in Reducing Poverty and Boosting Shared Prosperity

30. Poverty in Bulgaria declined rapidly from 2000 to 2008, driven by economic growth and structural reforms related to accession to the EU. During this period poverty, measured as the proportion of the population living on less than US$5 a day (PPP) fell from 37 percent in 2001 to 13 percent in 2008 (Figure 1.1 and Figure 1.2). Rapid poverty reduction was supported by high real GDP growth, which averaged 5.7 percent annually over the period, far surpassing both the EU15 average and the average growth rates for regional comparators. Economic growth was particularly pro-poor because low-skilled workers benefited most from the jobs growth. Between 2000 and 2008 nearly 600,000 jobs (17 percent of the labor force) were created mostly in sectors that employ a relatively high share of low-skilled workers, such as construction, trade, textiles, tourism, and real estate. Unemployment fell from close to 20 percent of the labor force to 5.6 percent—lower than the EU average. Yet, a significant share of the low-skilled jobs created prior to 2008 were financed through outsized foreign capital inflows which dried up as soon as the 2008 global financial crisis hit.

31. Ethnic minorities, and in particular the Roma, largely failed to benefit from Bulgaria’s economic growth during that period, due to an unfavorable starting point at the outset of the transition. Roma were among the first to experience layoffs caused by the large-scale restructuring during the early years of transition due to overall low education levels and overrepresentation in low-skilled jobs. The increasing lack of viable economic opportunities in the 1990s led to the emergence of severe poverty among the Roma population which further disadvantaged them in the labor market (Revenga, Ringold, and Tracy, 2002). The majority of Roma therefore failed to benefit from periods of economic growth in Bulgaria.

---

18 Based on NSI ESA2010 data.
19 Based on NSI ESA2010 data.
where production has been increasingly moving toward higher value-added sectors and services.

32. **The economic crisis at the end of 2008 and the absence of a pronounced economic recovery, pushed up poverty and fueled migration.** Poverty increased from 16.1 percent in 2008 to 18.5 percent in 2012 as growth remained anemic and the outsized capital flows that had fueled pre-crisis job growth stabilized at a much lower level. This increase in poverty holds for the absolute US$5 PPP poverty line as well as for a relative line based on 60 percent of national median income, anchored at its 2007 level (BGN 4.76 per person per day) adjusted for inflation. Among EU countries, Bulgaria has the highest rate of poverty and social exclusion and the second highest rate of being at risk of monetary poverty after Romania (Figure 1.2 and Box 1.1). In addition, Bulgaria’s share of the population living in households with a low work intensity in the EU is only surpassed by Croatia. In search of better opportunities, nearly 100,000 Bulgarians, mostly young people, have left the country since 2008.

---

**Box 1.1: Poverty, Social Exclusion, and the Europe 2020 Strategy**

Within the EU, the indicators in the Europe 2020 Strategy consider persons to be at risk of poverty or social exclusion if they are subject to any of three types of deprivation:

1. **Risk of (relative) monetary poverty (AROP),** defined as having a disposable income after social transfers equivalent to less than 60 percent of the national median.
2. **Severe material deprivation (SMD),** defined as living in a household that cannot afford at least four of the following nine items: (a) mortgage payments, rent, or utility bills; (b) adequate heating; (c) unexpected expenses; (d) meat, fish, or protein equivalent every second day; (e) a week-long holiday away from home; (f) a car; (g) a washing machine; (h) a color television set; or (i) a telephone.
3. **Low work intensity (LWI),** is a measure of the share of the population living in households in which adult household members (aged 18–59) worked less than 20 percent of their total potential working time in the past year.

**Table B1.1 Europe 2020 Indicators of Poverty and Social Exclusion**

<table>
<thead>
<tr>
<th></th>
<th>At Risk of Monetary Poverty (AROP)</th>
<th>Severe Material Deprivation (SMD)</th>
<th>Low Work Intensity (LWI)</th>
<th>Total At Risk of Poverty or Social Exclusion (AROPE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>21.0</td>
<td>43.0</td>
<td>13.0</td>
<td>48.0</td>
</tr>
<tr>
<td>Romania</td>
<td>22.4</td>
<td>28.5</td>
<td>6.4</td>
<td>40.4</td>
</tr>
<tr>
<td>Latvia</td>
<td>19.4</td>
<td>24.0</td>
<td>10.0</td>
<td>35.1</td>
</tr>
<tr>
<td>Lithuania</td>
<td>20.6</td>
<td>16.0</td>
<td>11.0</td>
<td>30.8</td>
</tr>
<tr>
<td>Hungary</td>
<td>14.3</td>
<td>26.8</td>
<td>12.6</td>
<td>33.5</td>
</tr>
<tr>
<td>Croatia</td>
<td>19.5</td>
<td>14.7</td>
<td>14.8</td>
<td>29.9</td>
</tr>
<tr>
<td>Poland</td>
<td>17.3</td>
<td>11.9</td>
<td>7.2</td>
<td>25.8</td>
</tr>
<tr>
<td>Estonia</td>
<td>18.6</td>
<td>7.6</td>
<td>8.4</td>
<td>23.5</td>
</tr>
<tr>
<td>Slovakia</td>
<td>12.8</td>
<td>10.2</td>
<td>7.6</td>
<td>19.8</td>
</tr>
<tr>
<td>Slovenia</td>
<td>14.5</td>
<td>6.7</td>
<td>8.0</td>
<td>20.4</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>8.6</td>
<td>6.6</td>
<td>6.9</td>
<td>14.6</td>
</tr>
</tbody>
</table>

---

20 These poverty rates are based on the US$5 per day international poverty line, but an identical pattern of rising poverty from 2009 to 2011 emerges using other poverty lines that are constant in real terms over time, such as the EU “anchored” poverty line, which updates each member state’s national poverty line only for inflation.
33. **Poverty has rural, ethnic, gender, and age dimensions:**

- **Rural:** nearly two-thirds of the poor live in rural areas where agriculture is usually the only sector offering jobs. Nearly half of Bulgarian farms are involved in subsistence farming and 75 percent of the farms are outside the scope of EU sectoral assistance. The workforce in rural areas is rapidly aging (with nearly 26 percent of the population above working age compared to 17 percent for urban population) and lacks capital assets.

- **Ethnic:** the poverty rate among the Roma is 33 percent (UNDP/WB/EC 2011) compared to 5 percent for their non-Roma neighbors; they account for a significant part of the poor but only 4.8 percent of the population. Roma women have significantly lower educational attainment and consequentially are more likely to be unemployed or employed in informal activities. Roma women have much lower economic activity rates compared to non-Roma women. There are indications that poverty may also be high among the Turkish minority, which constituted 8.8 percent of the population in 2011. Nearly 18 percent of ethnic Turks are unemployed, compared to only 8 percent of ethnic Bulgarians, and the activity rate for women is 10 percentage points lower for Turks than Bulgarians.

- **Gender and age:** poverty is higher for women, especially elderly women, than for men. Nearly 830,000 women in Bulgaria are at risk of poverty, of these 33 percent are older than 65; the comparable figures for men are 697,000 and 17 percent. Children, mostly Roma, are also at higher risk of poverty than the working age population.

34. **Poverty is spread unevenly over the six regions of Bulgaria.** The South-West region, where the capital city of Sofia is situated, has the least risk of poverty (Figure 1.3). Nonetheless, the population at risk of poverty also went up in Sofia between 2008 and 2013, as it did in most other regions. The South Central and North Eastern regions saw a particularly pronounced increase as they struggled with a steep increase in the unemployment rate of low-skilled workers.

35. **Despite its high poverty rates, the share of the working poor in Bulgaria is broadly in line with the regional average.** In 2013 the share (Figure 1.4) was 7.2 percent of the Bulgarian population aged 18–64; the median for the regional comparators was 7.4 percent. Bulgaria was also among the few countries in the region that saw improvement between 2008 and 2013 in the at-risk-of-poverty (AROP) indicator for this group. Young men (age 18-24) experienced the strongest decline in the working poor.
36. **Income inequality in Bulgaria is among the highest in the EU.** Bulgaria’s Gini coefficient based on equivalized disposable income is 0.35, the highest in the EU in 2013. Although inequality in Bulgaria started from a relatively low level, it has increased faster than in the rest of the regional comparators and is now the highest. Among the causes are: low-paid employment (especially for the large number of low-skilled workers); and inadequate coverage of the social protection system.

37. **Shared prosperity indicators show some positive developments since 2007.** Income growth of 1.4 percent per year between 2007 and 2011 among the bottom 40 percent of the population\(^{21}\) was faster than the 0.4 percent average for the entire population (Figure 1.5), and faster than GDP growth. However, the income growth of the bottom 40 percent of Bulgaria’s population was modest compared to most of the countries in the region (Figure 1.6), which suggests that the bottom 40 percent in Bulgaria were badly hit by the 2009 economic downturn. Most income growth among the bottom 40 percent took place during the economic upturn (Figure 1.7) but the ensuing crisis undid some of the gains, especially for the poorest, whose incomes had collapsed with the loss of many low-skilled jobs. Recovery from the crisis in Bulgaria has been sluggish and jobless, compounded by lingering structural issues and political instability in 2013-2014, which have dampened domestic economic activity.

---

\(^{21}\) The 2007–11 time period is used because that is the most recent period, and the longest time span, for which comparable data on household incomes are available.
Figure 1.7. Bulgaria: Growth Incidence Curves
Panel A: 2007–08

Source: Bank estimates based on EU-SILC.
**Box 1.2: The Asset-Based Approach**

An asset-based approach is used to understand the joint determination of economic growth and income distribution. The approach, elaborated in *Shared Prosperity: Paving the Way in Europe and Central Asia* (Bussolo and Lopez-Calva, 2014), provides an appealing way to analyze the determinants of income growth for different parts of the income distribution (Figure B2.1). It takes into account such macroeconomic variables as commodity prices, external conditions, the role of trade in the economy, the sectoral composition of growth, and fiscal structure and capacity. On the microeconomic side it examines the assets households and firms possess—human, financial, social, and natural capital; the intensity with which those assets are employed; and the returns on their use. Together the micro and macro variables determine shared prosperity. This approach is in contrast to the usual top-down macro approach, in which aggregate growth is determined entirely by macro variables, and the distribution or incidence of that growth is a separate element determined by redistributive policies. The approach is also more informed than a purely micro bottom-up approach, in which growth is largely a function of the productive capacity of the economy and the efficient allocation of household assets.

In the asset-based approach, demand-side issues are likely to be most critical in the short run and supply-side factors more influential for medium- and long-term growth (see figure B2.1). In the short run the distribution of assets may be taken as given, and demand-side variables such as the sectoral composition of growth, key prices, and external conditions will be more important. Over the medium and long term the level and distribution of assets may change, and the accumulation of these assets and the returns on them are important for driving growth and determining income distribution. At the micro level, household income-generating capacity is defined by an identity at the center of the figure. Three key variables are the stock of household assets (e.g., human and financial capital); the intensity of their use (e.g., hours worked, the capital/labor ratio), and the returns on the assets (e.g., wages). The product of these three variables represents market income. A fourth determinant of household income-generating capacity is net transfers.

**Figure B2.1. Asset-Based Framework for Determination of Growth and Income Distribution**

Source: Bussolo and Lopez-Calva 2014.

---

22 This section draws heavily on Bussolo and Lopez-Calva 2014.
38. **The potential to generate income of the bottom 40 percent of the Bulgarian population is constrained by its high share of elderly people.** The proportion of working-age members in a household is an important indicator of the potential to earn income and to support members of non-working age. As Figure 1.8 shows, Bulgaria’s bottom 40 percent has the highest average elderly dependency ratio among regional comparators because of population aging and continuing heavy reliance on the family support system—with both elderly taking care of grandchildren and working-age members taking care of parents. Family support is important for households to cope with inadequate access to child care and long-term care LTC services. This may be the reason for the stark contrast between the elderly dependency ratios of 45 percent for the bottom 40 percent of the population and 18 percent for the rest of the population.

39. **The human capital of the bottom 40 percent of the Bulgarian population suffers because their education attainment is less than that of the bottom 40 percent in any of the regional comparators.** Education—and more generally skills and know-how—are essential assets that open doors to more remunerative employment and may also better equip a person to succeed in self-employment. About 44 percent of working-age adults in the bottom 40 percent of the population have not completed secondary education and the share of those with no primary education is much higher than in the rest of the EU (Figure 1.9). Data from 2011 from the National Statistical Institute of Bulgaria show that about 70 percent of ethnic Turks and 93 percent of ethnic Roma do not complete upper secondary education. The gap between the bottom 40 percent and the top 60 percent is enormous, which suggests that employment opportunities for the bottom 40 percent are only in low-skilled, low-productivity, and low-paid jobs. In fact, employment rates for persons with only primary education have declined since 2000 and are now much more comparable to the average for the region (Figure 1.10). Employment for this group of persons was the highest during the boom, reaching 33 percent in 2008, but it had declined to 27 percent by 2013. The largest gains in employment were for those with secondary education, this also contributed to improvements in overall employment rates: employment of people with secondary education grew by 9 percentage points to 65 percent between 2000 and 2013. Employment opportunities for persons with higher education are high and their share in Bulgaria’s bottom 40 percent of the population is very low.

---

23 The elderly dependency ratio = the number of household members aged 65 or older divided by the total number of household members. This ratio is then averaged across all households in the bottom 40 and the top 60 percent of the income distribution.
40. **Because households in the bottom 40 percent have fewer financial assets, they are less able to withstand shocks.** Only 11 percent of households in the bottom 40 percent report that they can afford an unexpected expense equal to about €120, compared to 50 percent of households in the top 60 percent (Figure 1.11). Although the survey question is framed as the ability to meet an unexpected expense, the responses highlight a more general issue of inadequate savings and other liquid assets among the bottom 40 percent of the population. Bulgaria fares poorly on this indicator, the third lowest among the regional comparators, despite having one of the lowest monetary thresholds (because of its low income levels). Among marginalized Roma, savings are virtually nonexistent – less than 4 percent have savings and indebtedness is high (De Laat, 2012).

41. **Households in the bottom 40 percent not only have fewer human capital assets, they also use those they have less intensively than the top 60 percent since they are less likely to work.** One in four persons of working age in the bottom 40 percent of the population is not in the labor force: not employed and not seeking employment (Figure 1.12, left panel). Those who are working tend to be engaged either part-time or irregularly, which significantly limits their income. The unemployment rate for the bottom 40 percent of the population, at 26 percent, is also much higher than for the top 60 percent (Figure 1.12, right panel). In fact, shares of inactivity and unemployment of the bottom 40 percent of the population in Bulgaria are not much different from those in regional comparators. However, the Roma, who account for nearly 85 percent of Bulgaria’s working-age poor, have inactivity and unemployment rates that...
are four to five times that of non-Roma. Unemployment for Roma women is especially high; Roma men are more likely to participate in informal activities.

42. **Lack of social capital assets pose a particular disadvantage to ethnic minorities in finding work.** As jobs are often obtained through informal contracts, door-to-door inquiries, and word-of-mouth, the lack of social capital and employment networks restricts access to available options. A qualitative study on Roma labor market participation found that small- and medium-sized employers usually recruit their employees through personal networks, to which Roma have limited access. Roma reported that access to jobs was only possible with membership to certain social and/or political networks.

**Figure 1.12. Use of Labor Assets, Percent**

![Graph showing use of labor assets](image)

**Source:** EU Labor Force Surveys 2012

43. **Workers in the bottom 40 percent of the population tend to have less-skilled jobs, which pay lower wages.** Since they have less education, they are more likely to be employed in “elementary” than in professional occupations. As seen in Figure 1.13 (left panel), 27 percent of those in the bottom 40 percent of the population who are employed work in elementary occupations—far above the percentage in any of the regional comparators other than Lithuania. It is also 20 percentage points higher than the rate among the top 60 percent in Bulgaria. Similarly, only 4 percent of the bottom 40 percent of workers are employed in professional occupations (Figure 1.13, right panel), one of the lowest rates among regional comparators and less than one-fourth the rate in the top 60 percent in Bulgaria.

**Figure 1.13. Employment, Low-Skilled and Professional Jobs (Percent)**

![Graph showing employment rates](image)

**Source:** EU-SILC, 2011. Elementary = ISCO-08 category 9, professional is category 2.
44. **During 2007-11 labor incomes were less effective in boosting shared prosperity.** The limited assets of the bottom 40 percent of the population (large shares of elderly, rural population, people with low educational attainment) and less intensive use of these assets (large shares of unemployed, inactive, or employed in low-skilled jobs and in the informal sector) have meant negative contribution from labor incomes to the overall income growth of the poorest (Figure 1.14). In addition to these structural limitations, labor incomes were affected by the crisis in late 2008. This forced sectors that usually employ low-skilled and low-paid labor (such as mining, construction, trade, and agriculture) to lay off workers and thus adjust to falling demand. Real wages continued to grow (Table 1.1), although they grew more slowly, even after the crisis but average growth rates were affected by the laying off of low-paid labor.

![Figure 1.14. Contribution to Income Growth of the Bottom 40 Percent of the Population](image)

<table>
<thead>
<tr>
<th>Table 1.1. Real Wage Growth, Annual Average</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Total economy</td>
</tr>
<tr>
<td>Private sector</td>
</tr>
<tr>
<td>Public sector</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Agriculture</td>
</tr>
<tr>
<td>Mining</td>
</tr>
<tr>
<td>Manufacturing</td>
</tr>
<tr>
<td>Construction</td>
</tr>
<tr>
<td>Trade</td>
</tr>
<tr>
<td>Hotels</td>
</tr>
<tr>
<td>Transport</td>
</tr>
</tbody>
</table>

*Source:* World Bank staff estimates based on EU-SILC.

45. **Transfers have contributed to improving the income of the poorest but have not proved sustainable.** Public transfers, mostly pensions, were responsible for the growth of income of the bottom 40 percent of the population from 2007 to 2011 because the labor income-generation capacity of the bottom 40 percent was severely limited during the economic downturn and during the slow recovery of growth after 2009: 19 percent of recipients live in households that rely mostly on pensions. Pensions were raised twice in 2009 by nearly 20 percent in total; their growth exceeded the growth of average wages. The rise in pensions substantially widened the fiscal deficit in 2009 as revenues collapsed. To correct the excessive fiscal deficit and to ensure the sustainability of pension spending going forward, the government froze pensions in 2010–12 and initiated a pension reform that gradually raised the retirement age. Unfortunately, some elements of the pension reform have since been reversed.

46. **Relatively few poor people have benefitted from social assistance payments.** Bulgaria’s social assistance consists of many different programs – but most suffer from low coverage and inadequate targeting. Only 7 percent of the poorest quintile of the population receives the guaranteed minimum income and only 18 percent receive the heating allowance. The coverage of monthly child allowances is better, reaching 39 percent of the poor, but at the same time 44 percent of all benefits go to the top 60 percent. Similarly, unemployment benefits, despite absorbing a large proportion of labor market policy spending, cover only 14 percent of registered unemployed people (this includes short- and long-term unemployed workers).
According to the 2013 BLISS (World Bank 2014a), only 24 percent of those registered in the Labor Office within the previous 12 months were receiving unemployment benefits. The main reason that registered unemployed people do not receive benefits is that they are no longer eligible (37 percent of respondents), which implies that the long-term unemployed tend to be more vulnerable.24

Figure 1.15. Bulgaria: Remittances, Percent of GDP, 2000-2013

Figure 1.16. Bulgaria and Regional Comparators: Remittances, 2013, Percent of GDP


47. **Given the large number of Bulgarians living abroad, remittances represent an important source of incomes for the bottom 40 percent of the population.** Remittances have declined significantly since 2003 and have stabilized at around 3 percent of GDP since 2008 (Figure 1.15). Nevertheless, reliance on remittances as an income source in Bulgaria is much higher than in the regional comparators (Figure 1.16).

48. **To better understand the income-generation capacity of the bottom 40 percent of the population it is important to study the drivers of growth in Bulgaria.** The rest of this chapter discusses how these have shifted over time in order to understand how they contribute to the current profile of the bottom 40 percent of the population and to see what is needed to shift the country to a higher income growth path that can better sustain shared prosperity.

**The Contribution of Growth to Shared Prosperity**

49. **Bulgaria has come a long way despite a challenging transition.** In the 1990s, delayed structural transformation brought on a severe currency and banking crisis in 1996-97. After a crisis that plunged the economy into a deep recession, several months of hyperinflation soared to almost 500 percent in January 1997; following the subsequent free fall of the exchange rate and the closing of 18 banks, Bulgaria introduced a currency board in July 1997. A determined and steep fiscal adjustment, together with further structural reform efforts, resulted in macroeconomic stability. This macroeconomic stability was supported by a stable political environment and helped growth resume after almost a decade of contraction. The reform momentum was maintained in the run-up to Bulgaria’s EU accession in 2007. GDP per capita

---

24 After at least 3 years of covered employment, benefits are paid only for the first four months of unemployment spell; to receive benefits to 12 months, a person has to have 25 years of covered work. ([http://www.ssa.gov/policy/docs/progdesc/ssptw/2012-2013/europe/bulgaria.html](http://www.ssa.gov/policy/docs/progdesc/ssptw/2012-2013/europe/bulgaria.html)).
(PPP) grew from 28 percent of the EU average in 1997 to 45 percent in 2013. Yet, convergence was slower than that of some of the regional comparators that started from similar positions.

50. **Strong economic growth from 2000 to 2008 helped reduce poverty and improve shared prosperity.** The structural transformation of the economy during the EU accession process, supported by a favorable external environment, yielded solid income gains. While the currency board helped to instill fiscal discipline, the massive transition that Bulgaria underwent was the key driver of growth. Real GDP growth averaged 5.7 percent a year, driven by notable gains in productivity and employment. In contrast to the 1990s, when Bulgaria was lagging behind its regional comparators, its growth through 2008 was slightly better than the 5.5 percent median for the region. Moreover, heightened growth was associated with steady and relatively high growth in employment, which averaged 2.1 percent per year (based on NSI ESA2010 data), double the median rate for the regional comparators. A significant number of new jobs was created even for those in the bottom 40 percent of the population who had few or no skills. Unemployment fell from close to 20 percent in 2001 to 5.6 percent by 2008.

51. **Growth and prudent fiscal management led to substantial improvements in the fiscal accounts and public debt levels.** Between 2000 and 2008 Bulgaria mostly ran fiscal surpluses, especially during the peak of the boom in 2004–08. The public debt-to-GDP ratio plunged to one of the lowest in the EU: from close to 100 percent in 1997 to 13.3 percent by 2008. These fiscal improvements made Bulgaria more resilient to macroeconomic shocks. It also enabled Bulgaria to increase spending on vital public services, such as education, health, and public infrastructure. It could also support increased spending on adequate social payments to pensioners and those in need, who are heavily represented in the bottom 40 percent of the population as government interest spending declined.

52. **Yet, inefficiency of public spending remained unaddressed during the pre-crisis period.** In health, for example, a large and increasing share of government spending is allocated for expensive hospital care, while resources for more effective preventive and outpatient care are limited. Despite an increasing number of hospitals and hospital stays, health indicators of the population have not improved as much as in other EU countries and the quality of services is perceived to be the lowest in the EU. Access to health care is limited by large out-of-pocket payments (47 percent of health spending) and a significant share of uninsured persons (7-12 percent of population), thus contributing to Bulgaria’s high risk of poverty. Difficult decisions to improve the sustainability of the pension system have been postponed with measures implemented only to increase pensions, even on an ad hoc basis. Pension spending is increasingly financed by general revenues while the coverage is declining and equity is under threat as fewer Bulgarians, especially poorer ones, will be able to accumulate full pension rights. In education, important reforms were implemented to strengthen the efficiency of spending in primary and secondary education by introducing per student financing and consolidating schools. Yet, the quality and equity of the education system have worsened as a significant number of the bottom 40 percent continue to have low educational attainment and fewer opportunities for participating in growth. Productivity-enhancing spending, like R&D or infrastructure investment, remained low compared to regional comparators.

53. **During the boom domestic demand was the main driver of growth.** Surging domestic demand was a common feature of many fast-growing EU countries during this period, but Bulgaria’s boom involved some of the largest inflows of foreign capital and increases in investment (Figure 1.17). Between 2000 and 2008, investment in Bulgaria went up by nearly
19 percentage points, to 38 percent of GDP, with most of the investment taking place in 2004–08 (Figure 1.18). While this partly reflects the obsolescence of the country’s capital stock following years of underinvestment, the main driver was the exceptional availability of external resources that characterized the pre-2009 international capital and financial markets. FDI in real estate and financial intermediation was particularly strong (about 42 percent of the total FDI stock in 2008) but FDI also flowed to manufacturing, construction, trade, transport, and tourism, the sectors that generated most of the new jobs. Nevertheless, FDIs in Bulgaria have contributed much less to gross value added and employment than in most regional comparators. Bulgaria’s FDI stock as percentage of GDP was the highest in the region but FDI enterprises in Bulgaria generated only 26 percent of gross value added and 13 percent of employment in 2008.

Figure 1.17. Bulgaria and Regional Comparators: Contributions to Real GDP growth, 2000-08 (percentage points)

![Diagram](image)

**Source:** World Bank staff estimates based on Eurostat.

54. **Large external imbalances accumulated during the boom period.** Annual inflows of FDI peaked at an outsized 30 percent of GDP by 2007, and the current account deficit almost quintupled between 2000 and 2008, to 22 percent of GDP. External private sector debt soared to 94 percent of GDP in 2008, largely from FDI-related intercompany lending, this pushed total external debt to 102 percent of GDP even as public debt was steeply reduced. Some of the intercompany loans were from foreign parent banks to their Bulgarian subsidiaries; these were supplemented by foreign deposits, and spurred rapid growth in domestic credit.

55. **By 2009 the economic boom came to an abrupt halt, forcing an equally abrupt reversal of external imbalances.** After growing by about 6 percent a year since 2000, GDP fell by 5 percent in 2009 as domestic demand weakened and capital flows from abroad dried up. The impact on investment was substantial: it fell from 37.5 percent of GDP in 2008 to 23.2 percent in 2010 and has stagnated ever since. In the past two years the public sector has become a more prominent investor, partly due to faster absorption of EU funds. Strong exports and a much slower recovery of imports of capital and consumer goods resulted in a substantial narrowing of the current account deficit, which has shifted to surplus since 2013. In 2010–14 FDI plummeted to an annual average of less than 3 percent of GDP because of: the worsening outlook in the countries where the FDI originated; heightened political uncertainty in Bulgaria (in 2013-14); and lack of progress in enhancing the business environment. External debt, which fell by 11 percentage points of GDP between 2008 and 2013, has stabilized at about 95 percent of GDP.
56. **Domestic credit growth that fueled domestic demand prior to 2008 came to a near halt.** Supported by sizable capital inflows from parent banks to their subsidiaries in Bulgaria, credit to the non-government sector increased at close to 40 percent a year between 2000 and 2008. With the end of capital flows from abroad and worsened economic outlook banks became more cautious with lending and credit growth has declined to less than 1 percent per year since 2008 (Figure 1.19). Firms and households started to deleverage and gross non-performing loans increased from less than 3 percent of total gross loans in 2008 to 17 percent in 2014. At the same time, banks have managed to offset the effects of growing NPLs by strengthening of capital buffers. Sectors, such as construction, trade, and tourism, which were borrowing extensively before 2008, were now reducing rapidly their exposures. At the same time, real estate, manufacturing, electricity and gas, and agriculture continued to borrow.

**Figure 1.19. Claims to Non-government Sector, 2000-2014, Percent of GDP**

![Chart showing claims to non-government sector from 2000 to 2014.](chart)

*Source: World Bank staff estimates based on BNB.*

57. **The economic recovery since 2010 has been sluggish and jobless.** As per capita GDP growth decelerated to less than 1 percent and capital became scarce, to boost productivity companies shed considerable amounts of labor, especially in sectors with lower skill intensity, such as in industry, construction, agriculture, and trade. These developments cut opportunities for shared prosperity as a large portion of the bottom 40 percent of the population became jobless and had to resort to social assistance or rely solely on pension income. Between 2009 and 2013 the number of unemployed more than doubled, to 433,000 persons\(^{25}\), while the number of people too discouraged to seek work increased by nearly 60,000, to 207,000. Unemployment started to decline only in 2014, six years after the crisis, with the decline concentrated mainly in urban areas and affected people with completed secondary education, with no changes in the group of unemployed with primary and lower education.

\(^{25}\) Unemployed in the 15-64 age group, labor force survey data from NSI.
Figure 1.20. Bulgaria and Regional Comparators: Growth in Labor Productivity, Annual Average

Figure 1.21. Bulgaria: Labor Productivity and Employment Growth, 2000-14, Annual Average

Source: Eurostat.

58. **Labor productivity has been growing since 2008, though more slowly, and has been associated with loss of employment.** Average growth in labor productivity has slowed to 2.5 percent since 2008, compared to 3.3 percent in 2000–08. The highest gains were in finance and insurance, ICT, industry, and to a lesser extent trade, transport, and tourism (Figures 1.20 and 1.21). These were the sectors that had received the lion’s share of FDI inflows during the boom (Figure 1.22). Moreover, except for industry, these sectors saw some of the highest employment growth. After 2009, companies in industry, construction, trade, transport, and tourism underwent substantial labor-shedding to boost productivity.

Figure 1.22. Bulgaria: FDI in Bulgaria by Industry, 2000-2014, Percent of GDP

Source: World Bank staff estimates based on BNB.

59. **New jobs were created only in a few sectors that rely mostly on skilled labor.** Information and communication, financial services, real estate activities, and professional services (accounting, R&D, legal, scientific, and other technical services) were the only sectors where jobs have increased since 2008. However, most of these sectors, except information and communication and real estate, have not yet recovered completely in terms of either gross value added or labor productivity. Their potential to open up new jobs in the near future therefore seems limited. Construction, that provided a large number of jobs for the bottom 40 percent of the population, was the sector with the largest job losses, suffering an 8.2 percent decline in
employment between 2008 and 2014. The good news is that sectors like industry and trade, transport, and tourism, which have provided jobs to nearly 45 percent of the employed, do have potential to expand jobs once economic prospects brighten. Employment in these sectors has been growing since 2014.

60. **Jobs in the agricultural sector, which is particularly important to the bottom 40 percent of the population, declined along with gross value added and productivity.** Agriculture accounts for a large share of employment and is usually one of the few sectors providing jobs in rural areas where nearly half of the bottom 40 percent live. It is the only sector that experienced reductions in employment, gross value added, and productivity before as well as after the boom although there were some improvements in 2013 and 2014. Despite increasing subsidies to the sector since 2007, Bulgarian agriculture is among the least productive in the EU and its productivity has declined the most among regional comparators. For example, in 2012 the yield of sunflowers, a significant export, was 1.7 tons per hectare compared to 2 tons in Hungary and 4.3 tons in Greece. The low productivity is due to inefficient use of inputs (labor and capital) and assets (land); inadequate production management; less productive seedlings and plants; and less favorable natural conditions (Republic of Bulgaria 2014). The workforce in rural areas is rapidly aging (with nearly 26 percent of the population above working age compared to 17 percent for the urban population) and lacks capital assets. Nearly half of Bulgarian farms are involved in subsistence farming and 75 percent of the farms are outside the scope of EU sectoral assistance.

61. **More analysis is needed to assess the potential of agriculture to provide more productive jobs to the bottom 40 percent of the population.** For example, fragmentation of land might be an impediment to productivity growth in the sector but a substantial portion of agriculture that is already in large consolidated farms is mostly devoted to capital intensive grain production and involves relatively little labor.

| Table 1.2. Bulgaria: Gross Value Added, Labor Productivity, and Employment Growth, 2008-14 |
|-----------------------------------------------|-----------------|-----------------|-----------------|
|                                | Average Annual Growth, 2008–14 | Share of Total, 2014 |
|                                | Gross Value Added | Labor Productivity | Employment | Gross Value Added | Employment |
| Total                          | 0.4               | 2.2               | -1.7        | 100.0           | 100.0      |
| Agriculture                    | -2.8              | -1.1              | -1.7        | 5.3             | 19.4       |
| Industry                       | 0.6               | 4.4               | -3.6        | 23.5            | 19.9       |
| Construction                   | -3.9              | 4.7               | -8.2        | 4.8             | 5.2        |
| Trade, transport, tourism      | 2.1               | 2.7               | -0.6        | 21.3            | 25.1       |
| Information and communication  | 0.7               | -2.3              | 3.1         | 5.6             | 2.3        |
| Financial and insurance services| 1.8               | -0.7              | 2.5         | 7.7             | 1.8        |
| Real estate                    | 0.8               | -1.5              | 2.3         | 10.6            | 0.8        |
| Professional activities        | 1.8               | 0.9               | 0.9         | 5.5             | 6.8        |
| Public administration          | 0.0               | 0.9               | -1.0        | 13.2            | 16.0       |
| Arts, entertainment, and recreation | -0.4          | -1.4              | 1.0         | 2.5             | 2.9        |

*Source:* World Bank staff estimates based on NSI, ESA2010.
62. **Productivity and employment growth has been constrained in key sectors of the economy.** Productivity and employment growth in the non-financial firms have largely moved in the same direction according to firm level data\(^{26}\) (World Bank 2015b) with younger firms outperforming older firms. Entry of productive firms and exit of firms with below average productivity, mostly in services, contributed to 30 percent of the economy-wide total factor productivity (TFP) growth between 2010 and 2012. In fact, TFP growth since 2009 has been lower than in most of the regional comparators and was mainly concentrated in services and construction. No significant improvements have taken place in manufacturing and especially in the medium-high technology sector, which includes machinery and equipment and chemical products, while regional comparators experienced significant productivity gains. There is evidence of significant and increasing misallocation of resources as less productive firms employ the bulk of the labor while highly productive firms remain small. Due to misallocation, Bulgaria’s manufacturing and service sectors are operating significantly below their production possibility frontier. In manufacturing, which is dominated by old and large firms, facing lower competition, TFP was only 55 percent of the efficient level in 2012, down from 58 percent in 2009. The TFP of the service sector, dropped from a peak of 36 percent in 2010 to 30 percent of its efficient level in 2012.

63. **Exports had a significant role in the economic recovery and in heightened labor productivity.** Because it is a relatively small economy, Bulgaria’s growth and convergence prospects are closely related to its performance in international markets. With a trade-to-GDP ratio exceeding 70 percent for 2009–13, Bulgaria is already well integrated with foreign partners; Germany, the EU’s most competitive economy, is Bulgaria’s most important trade partner, followed by Italy, Greece, and Romania. The global financial and economic crisis in late 2008 triggered a serious slump in external trade, but Bulgaria recovered relatively quickly and since 2011 exports have surpassed their pre-crisis levels, with growth concentrated mainly in exports of goods. In terms of its level of income, the country’s goods export basket is well diversified, but its income potential is lower than that of regional comparators (World Bank 2015). Further specialization in high value-added, high-wage activities could stimulate productivity growth. There is scope to enrich technological content and product complexity (Figure 1.23) and to expand exports to current destinations. There is also significant potential for exporting services (Figures 1.24 and 1.25): in 2013 exports of services were only 84 percent of the 2008 level. Bulgaria’s services exports used to be relatively high compared to the regional average but are now falling behind; today Bulgaria mainly exports traditional services (transport and travel); expansion of more modern services (such as communication, banking, insurance, business-related services, remote access services, call centers, and some educational services) has been slower than in regional comparators.

\(^{26}\) The firm level analysis covers non-financial firms, excluding some sectors with a limited number of firms, such as in energy, oil processing as well as some beer production firms where number of firms by regions was less than 3.
Figure 1.23. Merchandise Exports: Technological Content, Product Complexity, and Comparative Advantage

Source: UN-Comtrade data.

Figure 1.24. Bulgaria and Regional Comparators: Sophistication of Exports of Services, 2005-2012

Source: Trade in Services Database, IMF BOPS, and World Development Indicators.

Figure 1.25. Bulgaria and Regional Comparators: Diversification of Services Exports, 2005–13

Stronger exports were not sufficient to accelerate convergence of Bulgarian incomes with the rest of the EU. During the boom, Bulgaria advanced relatively well in closing the income gap with the rest of the EU. Since 2008, however, progress in closing the gap has been slower, revealing a number of structural weaknesses. Income convergence has been slower than in most of the regional comparators, except Slovenia, Croatia, and the Czech Republic (Figures 1.26 and 1.27) even though of its regional comparators Bulgaria is starting with the largest income gap with the EU. This means that Bulgaria has not fully used the potential of EU membership to improve living standards and stem emigration.

27 One way to measure export sophistication is to identify exports that are predominantly produced by higher income countries, and which are therefore associated with higher productivity levels, and then determine the share of these services in the total exports of a given country (Hausmann, Hwang, and Rodrik 2006).
65. **With prospects of subdued exports growth and weak foreign capital flows, income convergence hinges on structural reforms.** External demand for Bulgaria’s exports has been repressed by events in Ukraine, slowing economic growth in Turkey, and limiting recovery in the EU. Export growth decelerated at the beginning of 2014 and actually declined in Q3-2014. Meanwhile, foreign capital flows have largely been negative since 2010. Net FDI in Bulgaria at about 3 percent of GDP is still relatively high compared to the average for the region (and the stock of inward FDI’s is close to 100 percent of GDP, the highest in the region). The contribution of foreign-owned enterprises to Bulgaria’s economy has increased, although from low levels. These enterprises generated nearly 32 percent of gross value added in 2011, 6 percentage points higher than in 2008, but gains in terms of employment were more modest—only 1 percentage point compared to more than 2 percentage points in most countries in the region. Other capital inflows have mainly been directed to the government in the form of EU-funded capital projects and government debt. Capital transfers from the EU to Bulgaria are relatively low compared to the average for the region and have recently been falling because of temporary suspension of EU funds for environment and regional development projects. As they continue to deleverage, banks are significantly reducing their exposure to Bulgaria. Its political instability, with frequent changes in government in 2013-14, and pressures in the banking sector (closing of one bank and provision of liquidity support to another) have negatively affected decisions for both consumers and investors, domestic and foreign.

**Governance Challenges**

66. **Governance problems have diminished the effectiveness of domestic policies in support of growth and shared prosperity.** Three broad dimensions of governance, a cross-cutting issue, have a critical bearing on the ability of public policies and institutions to generate growth that is inclusive and sustainable. Kaufmann and Kraay (2010) define governance as:

The traditions and institutions by which authority in a country is exercised. This includes (1) the process by which governments are selected, monitored and replaced; (2) the capacity of the government to effectively formulate and implement sound policies; and (3) the respect of citizens and the state for the institutions that govern economic and social interactions among them.
Poor institutions have long been cited to explain the relative underperformance of economies, and cross-country empirical work confirms this relationship; a number of studies have related better institutional quality to higher per capita income and greater economic growth (Acemoglu et al. 2001, Dollar et al. 2003, Knack et al. 1995, Mauro 1995, Rodrik et al. 2004).

67. **Bulgaria has consistently underperformed almost all other EU countries on governance indicators.** Figure 1.28 shows that the gap is highest in terms of rule of law (quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence); control of corruption (the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, and "capture" of the state by elites and private interests); and government effectiveness (quality of public services, quality of the civil service and how independent it is from political pressures, quality of policy formulation and implementation, and the credibility of the government's commitment to its policies). Since 1998 Bulgaria has advanced in closing the gaps in these areas but it is still far from the regional comparators (Figure 1.29). Moreover, Bulgaria is falling behind regional comparators in terms of political stability and voice and accountability.

![Figure 1.28. Governance Indicators, 1998–2013](image)

**Source:** Worldwide Governance Indicators.

68. **Progress in ensuring the rule of law has not been sufficient to speed up control of corruption and make government more effective, both of which are critical for Bulgaria’s successful integration into the EU.** Seven years after entering the EU Bulgaria must still be monitored under the EU’s Cooperation and Verification Mechanism (CVM) because it has not completed reforms of its judicial and legal system. The CVM focuses on the independence, accountability, transparency, and efficiency of the courts and the fight against high-level corruption and organized crime. The 2014 CVM report concluded that progress on achieving the benchmarks is “fragile” and not yet sufficient. The report was particularly critical of integrity issues in senior appointments, political influence on the judiciary, and the ability of a few convicted organized crime figures to escape justice. There are very few court cases where crimes of corruption or organized crime have been brought to a verdict.

69. **Governance challenges affect Bulgaria’s growth and shared prosperity through three major channels: (1) competitiveness, (2) access to key services, and (3) stability.** Failures in regulatory policies and institutions, functioning of the judiciary, and shortcomings in management of public investment and public procurement make it difficult to establish a level playing field for Bulgarian companies. They also raise the costs of investing. Meanwhile, policy inconsistency, ineffective public administration, vested interests and cronyism limit the access of the poor to key public services and undermine their quality.
Competitiveness

70. **Competitiveness is compromised because regulatory authorities lack the independence and capacity to perform their functions properly.** This is exemplified by the problems in the power sector (see chapter 2), where inconsistent reforms, convoluted state ownership structures, and regulatory failings are bringing it to the brink of financial collapse. The Rapid Power Sector Assessment (World Bank 2013o) concluded that key market mechanisms were not in place, and the arrears of the National Electricity Company (NEK) put private generators and energy producers at risk. That the independence of the Energy and Water Regulatory Committee (EWRC) was insufficient is evident from the frequent changes of its chairman. The capacity to regulate effectively has been constrained by the lack of accounting standards and cost benchmarks for regulating utilities.

71. **Court decisions are widely perceived as subject to corruption and undue influence.** The performance of the courts, which has a critical impact on competitiveness, can be viewed from three angles: efficiency, quality, and access. Of these, quality seems to be most problematic given the general perceptions of corruption and undue influence on the judicial system. The *Global Competitiveness Report* for 2014–15 ranks Bulgaria 126th out of 144 countries for judicial independence and 110th for the protection of property rights. It identifies corruption as the most problematic factor for doing business in Bulgaria. This view echoes other surveys, such as Transparency International’s *Global Corruption Barometer for 2013*, which scored the judiciary worse than any other institution: 86 percent of Bulgarian respondents viewed the judiciary as corrupt or extremely corrupt, and 13 percent reported having paid a bribe to the judiciary in the previous 12 months. Among factors contributing to quality problems are manipulation of case assignments to judges, nontransparent procedures for appointing judges, and declining ability of independent media to hold the legislative, executive, and judicial powers accountable. Efficiency problems are also rampant, caused by court delays, case-load mismatches, and fragmented case management systems (World Bank 2015). Access problems are relatively minor. All aspects of judicial performance suffer from a lack of data and such performance indicators as court user surveys, which need to be used more actively to improve management and evaluation; they should also be made public.

72. **Public investment management does not comply with best practices.** Effective management of public investment increases the productivity of the private sector and thus the competitiveness of Bulgarian firms. Since 2007, public investments have held steady at close to 5 percent of GDP, with three-quarters financed by EU funds. Public investments provide the opportunity to upgrade infrastructure, bring it closer to EU standards; and to allow Bulgaria to comply with EU directives where it is lagging. Although there should be clear priorities by sector, current practice does not support setting national priorities or controlling the quality of investment proposals, and control over local investments is limited. Moreover, evaluation of project proposals is often understood as simply engineering analysis; there is little capacity for assessing economic and social benefits. Transparency and accountability for capital spending are minimal. Some projects have been underway for decades.

73. **The key infrastructure sectors had to undertake strategic exercises before the EU 2014–20 programming period, but there are still numerous implementation and financing challenges.** As part of the preparation for the program, draft strategies and investment plans had to be prepared in all key spending sectors, but these have not been reconciled in a way that recognizes the resource shortage by prioritizing investments. There are extreme financing gaps
for reaching set EU objectives (in water and sanitation, for example), and for having a transformational effect on the economy (for example, in roads, for both EU integration and access to remote areas; or to improve rural livelihoods by developing irrigation or adapting forests for commercial use). Deadlines for several strategies have been extended to the end of 2016 (e.g., transport, and aspects of agriculture and irrigation). The lack of a coherent strategic plan is a real problem because current investment spending priorities change often.

74. **Shortcomings in public procurement have been a major cause of delays in getting public investment projects completed but capacity for managing projects has improved.** The significant economic benefits of effective procurement practices (such as greater transparency, faster procedures, and more competition) are not being fully exploited. The 2011 CVM report found a general irregularity rate of 60 percent among all verified tenders related to EU funds and irregularity in almost 100 percent of large public infrastructure projects where the authorities had an obligation for ex ante control. Getting projects done has also been hindered by legal complexities and lack of stability; contracting authorities who lack knowledge of the law; a shortage of qualified staff and experts; high staff turnover; and a lack of support for smaller contracting authorities. The capacity for managing EU-funded projects has improved since then with nearly 76 percent of the Cohesion Funds\(^{28}\) allocated to Bulgaria already disbursed by early June 2015. With such an absorption rate, Bulgaria fares better than countries that joined the EU in 2007 and 2013 (Romania and Croatia) but remains behind countries like Estonia, Lithuania, and Poland with absorption rates of more than 90 percent of allocated funds.

75. **Public procurement deficiencies are also a major obstacle for business.** A few companies seem to dominate the market for procurement in areas such as road construction. Of the respondents to the Bulgarian Eurobarometer survey, 58 percent (the highest in the EU) said that corruption had prevented them from winning a public tender or procurement contract in the previous three years; 66 percent considered corruption to be widespread in public procurement managed by national authorities; and 78 percent thought the same of local authorities.

76. **Recent policy initiatives aim at addressing these deficiencies.** A National Strategy for the Development of the Public Procurement Sector in 2014-2020 was adopted and further measures are being taken to improve the legislation and methodology in this area. These measures include the preparation of a new Public Procurement Act, plans for improving e-procurement, and strengthening the administrative capacity of public procurement contracting authorities and the supervisory agencies.

*Access to Public Services*

77. **Access to public services is difficult because of inconsistencies in policy formulation and implementation, inefficient public institutions and administration, vested interests, and cronyism.** Policy inconsistencies have been damaging for health care and pensions, where reforms have been reversed under the pressure of vested interests or for short-term gains. For example, delayed restructuring of hospitals has consistently increased health care costs without commensurate improvements in service quality. The pension reforms initiated in 2011 that envisaged measures to make the pension system more financially

\(^{28}\) https://cohesiondata.ec.europa.eu/EU-Cohesion-Funding/Bar-chart-Funds-Absorption-Rate-Cohesion-Policy-20/g67v-zjiyr
sustainable were discontinued when a new government came into power. As a result, more state budget resources were channeled to the pension system and its equity worsened as wealth was redistributed from the unsubsidized poor to subsidized wealthier groups. Because reforms in education have been insufficient, learning outcomes have deteriorated and schools have become more socially stratified limiting opportunities for the poor to acquire the skills the labor market needs.

78. **Systemic reforms to public administration have stalled.** Administrative reform in recent years consisted mainly of reducing staff, eliminating duplication of some functions, and initiating reform of civil servant remuneration. The main structures of government and their methods of operation remain largely unchanged. In particular, weaknesses at the center of government, such as coordination capacity, strategic planning and formal ex ante mechanisms for monitoring, have not been addressed. In its June 2014 assessment of the national reform and convergence programs for Bulgaria, the European Commission confirmed that there had been no progress in modernizing public administration due to fragmentation, lack of commitment to in-depth reforms, and failure to steer policy. As a result internal organization and management practices are still inadequate; the civil service has been significantly politicized, as is evident in the high turnover of staff after each change in government; and the policy-making process is of poor quality due to a lack of regular impact assessments, monitoring and evaluation of policy application, and unclear distribution of functions between central, regional, and local administrative levels. Update of the e-government portal to start delivering real-time e-services has not been completed. Integrated and coordinated e-government services are not sufficiently available, particularly e-health, e-procurement, and e-justice.

**Stability**

79. **Political instability, state capture, and inadequate harmonization with EU norms of legislation and its implementation are threatening macroeconomic and financial stability.** Bulgaria has managed to control deficits and steeply reduce public debt to one of the lowest levels in the EU. However, having five different governments in less than two years has heightened fiscal pressures. The deficit widened from 0.9 percent of GDP in 2013 to 2.8 percent in 2014 on accrual basis (3.7 percent on cash basis) and during 2014 public debt grew by close to 10 percentage points of GDP. The budget deficit almost doubled compared to the initial target of 1.8 percent of GDP (on cash basis). The rapid deterioration of the fiscal position was a combination of underestimation of revenues and increased spending pressures from unreformed sectors such as health and internal order. In addition, the turbulence in the banking sector, where deficiencies in the regulatory and supervisory environment have required significant amounts of government support to the banking sector. The government provided support of close to 2.9 percent of GDP to help the banking sector shore up the liquidity of the third largest bank in Bulgaria, the First Investment Bank (which suffered a run on deposits), and recapitalize the Deposit Insurance Fund (DIF) after the fourth largest bank, KTB, became insolvent. Serious breaches of prudent banking practices were uncovered at KTB, where close to 70 percent of the portfolio was estimated to be a loss. Moreover, contingent liabilities are mounting in power sector SOEs (due to inadequate regulation) and the railways (due to lack of financial discipline and a business culture). Collectively, all these problems, which are mainly related to governance, threaten the country’s entire financial stability. More detailed examination of issues and opportunities to address them in each area are presented below.

29 http://www.sgi-network.org/2014/Bulgaria/Executive_Capacity
80. Reform stagnation and a dearth of clear positive outcomes of public policies have undermined trust in the ability of the government to rebuild democratic institutions. Insufficient reform is a recurring theme in Bulgaria, as is evident in such diverse areas as: public administration, regulation, the courts, corruption and organized crime programs, and public health, education, and social safety net services; in all of these areas reform has basically ground to a halt. For six consecutive years the slow pace of economic recovery has meant loss of jobs and lower incomes. Public disillusionment and doubts that the government can turn around growth prospects have reduced trust in the government and all government institutions. This was reflected in the revolving door of short-lived governments in fragile coalitions that have short-term policy horizons. This vicious circle of lack of accomplishment and lack of trust can only be broken by determined political leaders who are prepared and willing to make bold changes.

The Need to Accelerate Growth through Increased Productivity and Job Creation

81. To boost shared prosperity, Bulgaria needs faster, more inclusive, and more sustainable growth. The potential for raising the incomes of the population, especially of the bottom 40 percent, is limited if GDP growth continues at its current rate of less than 2 percent a year. Faster growth should be underpinned by greater productivity and more jobs and greater labor force participation. However, recovery in economic activity and job creation has taken longer than expected and substantial short-term improvements are unlikely.

82. Recent economic performance and medium-term prospects depend on domestic policies and Bulgaria’s potential to make the most of the EU funds to boost competitiveness investment and competitiveness. GDP grew by 1.7 percent in 2014, a slower pace than regional comparators (except Croatia which saw a decline). Labor productivity rates have been declining since 2010 from 4.9 to 1.3 percent in 2014 and employment increased only in 2014, six years after the crisis, while it took three to four years for employment to recover in regional comparators. Bold structural reforms are needed to boost confidence among producers, investors and consumers that Bulgaria is firmly on the path of higher economic growth. Preserving the status quo would mean continuing slow growth of output and employment in the medium term and would mean weak prospects for boosting shared prosperity and accelerating convergence of living standards. With capital inflows and external demand for Bulgarian exports both low, Bulgaria will have to fully use the potential of EU funds to boost investment and competitiveness. More forceful domestic policies will help make growth more inclusive, and create opportunities for increased mobility and economic participation for the bottom 40 percent of the population. Domestic policies also need to ensure that growth is sustainable in all three dimensions: fiscal, social, and environmental.

83. Demographic changes risk undermining aggregate growth and fiscal sustainability. Bulgaria’s population is rapidly declining and aging: in only three decades Bulgaria has become the third oldest country in Europe, and by 2050 its working-age population is projected to be 40 percent lower than in 2010, the steepest decline in the world. This extraordinary demographic change is a result both of significant emigration that began in the late 1980s and intensified during the transition, and of negative natural population growth.
Between 2008 and 2013 demographic change was already depressing growth, and the situation is likely to worsen in the years ahead when fewer workers will have to generate income for the entire population. Simulations (World Bank 2013n) suggest that in the baseline scenario, GDP growth will decelerate to 1.2 percent annually by 2030 and slow even further to 0.7 percent by 2050, mainly because of a shrinking labor force. Meanwhile, aging will heighten demand for public spending on health, LTC, and pensions, which will lead to substantial increases in public debt threatening the sustainability of public finances.

Figure 1.30. Convergence to EU Income Levels, Real GDP per Capita, Purchasing Power Parity

Productivity in Bulgaria will need to grow by at least 4 percent annually over the next 25 years to catch up with average EU income levels by 2040 (Figure 1.30) and thus boost shared prosperity. Convergence could be achieved a decade earlier than this if productivity were to grow at 5 percent per year. Maintaining such high productivity growth is difficult but not impossible, as demonstrated by Romania and Latvia in 2000–14. Higher economy-wide productivity growth is also likely to be linked to higher employment growth, as evidenced in Bulgaria and some regional comparator countries between 2000 and 2014. Productivity could be enhanced within specific sectors but could also be the result of structural transformation in which higher-productivity sectors absorb an increasingly large share of the workforce.

The effect of Bulgaria’s demographic change on productivity growth is hard to predict, though the employment rate is most likely to increase. Bulgaria’s decline of the working-age population goes hand in hand with population aging. As the working-age population continues to decline, it will become easier for workers to find jobs in the absence of any other changes. The impact on productivity growth is ambiguous. The declining working-age population is also most likely to increase labor productivity at least in the short term. But as the share of elderly in the population increase, Bulgaria’s structural transformation could slow down, as elderly workers are less likely to move into sectors with new technology and start new firms. A recent World Bank study (World Bank 2015b) found that the employment share of those under the age of 50 increased more in high productivity sectors while the share of workers above the age of 50 remained constant. Crespo Cuaresmo et al. (2014) found a clear positive association between productivity and the share of younger workers across sectors in Europe. As a result, it will become increasingly important for Bulgaria to offer high quality
primary and secondary education to most Bulgarians. This would enable younger workers to work in more technology-intensive sectors and facilitate life-learning. In order to achieve this, Bulgaria would need to reduce the high rate of NEET youth; improve the quality of education in some schools; and ensure that the Roma, who are an increasing share of the population, get better access to education.

86. **Lifting employment is difficult because of low demand for labor in the short and medium term and inadequate skills and because of the extreme demographic situation in the long term.** Expanding the current low rates of employment could moderate the demographic drag on growth to some extent. Employment is one of the Europe 2020 indicators and Bulgaria has still a long way to go to reach its target of 76 percent of the population aged 20–64 (Figure 1.31) from 63.5 percent in 2013. The employment rate for women is 60.7 percent, much lower than the 66.4 percent rate for men, and is especially low among young, elderly, and Roma women. Employment rates are also low for Roma, ethnic Turks, and low-skilled workers. The current weak demand for labor has its roots in poor governance, reform stagnation, and business environment issues. Despite the recovery in exports during 2008-13, employment has not recovered. Longer-term prospects for employment will also depend significantly on enhancing the skills of the labor force.

87. **Faster growth, underpinned by reforms that promote productivity and by more jobs, can markedly improve the welfare of the bottom 40 percent of the population.** Simulations (World Bank 2015) suggest that incomes of the bottom 40 percent of the population could grow at close to 4 percent annually between 2014 and 2050 (Figure 1.32) if a combination of reforms to enhance productivity and promote jobs are put in place. For example:

(1) simpler business regulation that complies with the rule of law and is implemented by more effective, transparent, and accountable institutions would encourage more foreign and domestic investment; facilitate integration into global value chains; and increase the innovation capacity of Bulgarian firms, thus helping to strengthen demand for labor.

(2) a better-skilled workforce could take advantage of new and more productive jobs as they emerge. Upgrading skills will be critical to strengthen innovation, attract FDI and increase firm entry which would all contribute to fast growth and income convergence with the rest of the EU.

(3) better infrastructure would improve competitiveness and integration into EU and global markets. A more efficient transport network can reduce costs to producers, investors, and traders and make Bulgarian firms more competitive by linking regions within Bulgaria and Bulgaria with other EU countries and the rest of the world.

---

30 According to the 2013 BLISS data (World Bank 2014a).
88. **Faster growth, however, will not be sufficient to achieve the twin goals if growth is not inclusive.** Inclusive growth means that the bottom 40 percent of the population participate more actively in the generation of income and have access to the public services they need. Nearly half of the bottom 40 percent of the population aged 20–64 are either unemployed or outside the labor force. The situation of the Roma merits special attention because although they will constitute an important part of the future labor force, their education and formal work experience is limited, which reduces their employability. Recent portraits of labor market exclusion (World Bank 2014i) identified four clusters of the population who have high activation needs because of their poverty and relatively high activation potential; i.e. challenges in terms of age, skills, and location, or motivation to be included in the labor market: middle-aged unemployed; low-educated rural long-term unemployed; single men who are not in education, employment, or training (NEET); and stay-at-home young mothers. Policies to activate these groups will expand their options to improve living standards and reduce reliance on social assistance. The main challenge will be to systematically implement measures to include hard-to-reach jobseekers (including Roma), and to refine some marginal elements to ensure that (Roma) jobseekers’ needs are addressed. Incompletely implementing the effective activation policy can pose substantial risks to the prospects of the disadvantaged and long-term unemployed, in particular those who suffer from severe forms of social exclusion, skill deficiencies, and discrimination. Some of the solutions might come from ensuring greater access to, and more efficient provision of, health and long-term care services, which is limited for poor and disadvantaged groups because of high out-of-pocket payments for health services and almost non-existent LTC. Other solutions for activation entail improving links between institutions and policies for employment services with social assistance; this is often not effective in reaching out to the inactive population and thus protecting the poor. Coverage and adequacy of SSNs are limited and 44 percent of the most common social benefits go to the top 60 percent of the population. Moreover, if activation policy is to help the most vulnerable segments of society, potential unjust incentives in the social protection system need to be eradicated. Pension system coverage is low and is expected to worsen as the population ages; by 2075 half of all pensioners will get only the minimum pension or not be covered at all, meaning that substantial transfers will be required from general revenue.

89. **Finally, making sure growth is sustainable will necessitate managing the macroeconomic, social, and environmental risks.** Sound fiscal and financial sector policies have underpinned macroeconomic stability, but events in 2014 highlighted vulnerabilities. Introduction of the currency board and reduction of public debt through rigorous deficit control have been centerpieces of the policy. However, stability continues to be challenged by slow economic growth and deflation; rising contingent liabilities due to worsening SOE financial conditions; and a banking sector that was shaken by three bank runs in a year. The fiscal impact of the 2014 banking crisis illustrated how easily financial weaknesses can have large fiscal
impacts under the currency board arrangement. Moreover, sound fiscal policies will be important to ensure that Bulgaria’s economy remains competitive under this arrangement. In particular, improving the efficiency of fiscal spending and reducing fiscal risks are important and strong private investment will be key for boosting growth, given Bulgaria’s constraints to ramping up public investments. This will require structural reforms and strong governance. However, delayed economic recovery and limited progress in addressing governance issues have undercut public support for serious reform. If Bulgaria’s reform efforts are to succeed, it will have to broker a broad consensus on the long-term vision for economic and social development and strategies to achieve it. These strategies include the ability to adapt to and mitigate such environmental risks as vulnerability to floods and drought and to ensure the quality of drinking water, as the negative impact of these on the bottom 40 percent of the population is likely to be substantial. Strategies also need to be devised to ensure the sustainability of rural spaces (forestry, rural land use, and consolidation). The strategies should exploit all opportunities for effective use of EU funds, creation of SMEs, and acquisition of technical knowledge and skills that environment-related public investment and policies may offer.

90. **Recent economic developments and challenges arising from the expected demographic changes raise three strategic questions for the Bulgaria SCD:**

- How can faster growth be achieved?
- How can inclusive growth be ensured?
- How can the sustainability of growth be assured?

91. **Although there are obvious synergies between policies that help spark, sustain, and make growth inclusive, each of these questions is addressed separately.** For instance, fiscal policy can provide a platform for both accelerating growth and enhancing its inclusiveness. The recommendations prioritize policies that foster the greatest synergies between these three objectives.
2. Opportunities for Bulgaria to Grow Faster

92. To improve the welfare of the bottom 40 percent of the population, Bulgaria needs to set in motion growth that generates more and better (more productive) jobs. Growth must be fueled by jobs and a reallocation of labor from less to more productive sectors. Bulgaria can capitalize on the recent emergence of high-productivity sectors in its economy (e.g., information and communication and potentially such services as logistics, tourism, and professional services) and on fuller integration into high-value European chains. A better business environment based on broad structural reforms and strict adherence to the rule of law, particularly respect for contracts, will foster the confidence in Bulgaria of investors, both domestic and foreign. That in turn will stimulate creation of jobs. Such measures, reinforced by investments in skills and infrastructure, could generate a virtuous circle of growth and prosperity.

93. The higher the productivity growth, the easier it will be for Bulgaria to manage its demographic change. Because Bulgaria’s working-age population is shrinking, sustainable growth in aggregate income will need to rely on the country becoming more productive to support labor demand, competitiveness and growth. Given the magnitude of Bulgaria’s demographic challenge, improvements in social sector policies alone are unlikely to suffice. The implementation of productivity-enhancing policies will be crucial for sustaining long-term growth and for paying for increased outlays on health spending and long-term care as the population ages. It is also likely to generate better employment opportunities, which will induce more adults to participate in the labor force and to stay in or move to Bulgaria. It is also necessary to raise household savings to ensure that the elderly can afford a decent standard of living.

94. Boosting jobs and productivity in Bulgaria will require a combination of:
   - Improving the business environment to strengthen competition and private innovation;
   - Upgrading the skills of the population, especially the bottom 40 percent of the population, to bring in those excluded from the formal sector and to keep an aging workforce productive; and
   - Infrastructure investments to link Bulgaria more closely to Europe and to help make Bulgarian firms more competitive.

95. The sections that follow explain the rationale for the policies suggested to ensure faster growth.

Improving the Business Environment

96. Bulgaria needs better incentives for businesses to produce, invest, and innovate so as to improve its economic prospects and stop, or preferably reverse, emigration of young Bulgarians. Improving the business environment relative to the rest of the EU would give Bulgaria the competitive edge and positive shock it needs to reinvigorate growth and restore the confidence of both producers, investors, and consumers. That would help mitigate the negative effects of an unfavorable external environment and would stabilize growth at higher rates than the country has experienced since 2008. With brightening economic prospects and
better job opportunities, young people are more likely to stay in or return to Bulgaria. This is important because young people are more likely to contribute to structural change in the economy by entering more productive sectors. Otherwise, even if the quality of education and infrastructure improve, young people, especially those most skilled, are likely to leave.

97. **Since 2005 Bulgaria has barely advanced at all in Doing Business rankings, and is actually falling behind some of its peers.** Bulgaria’s distance to frontier\(^{31}\) for ease of doing business is worse than the EU median (Figure 2.1). It has made advances in ease of starting a business, paying taxes, and trading across borders, but enforcement of contracts, getting electricity, and paying taxes continue to be problematic compared to the EU, and although trading across borders has improved, it still takes longer and costs more in Bulgaria than in the rest of the EU. Firms in Bulgaria still face unnecessary regulations, documentation requirements, and administrative fees that encumber daily business operations and limit competition even in the domestic market (Figure 2.2). Since June 2013 the government has adopted over 100 measures to reduce the regulatory and administrative burden, but there is no formal mechanism for the government to regularly review the national and municipal business environment and propose simplifications to increase efficiency. Firms report that the time to get a construction permit, import license, or operational license almost doubled between 2008 and 2013. These delays present obstacles to firm entry. Exit procedures are also lengthy, insolvency procedures costly, and recovery rates low. According to the 2013 Business Environment Enterprise Survey (BEEPS), senior managers of firms are spending more of their time dealing with public officials or public services than in 2008. In 2008 it took 14 percent of their time and in 2013 it took 22 percent of their time.

Figure 2.1. Doing Business: Distance to Frontier, 2014 (from 0. Lowest performance to 100, the frontier)

Figure 2.2. Intensity of Local Competition\(^1\)


\(^1\)In your country, how intense is competition in the local markets? [1 = not intense at all; 7 = extremely intense].

98. **In some cases poor quality, rather than excessive, regulation is hurting businesses.** Inadequate regulatory institutions themselves are often at the root of the problem; for instance, the electricity regulator’s management and independence issues are creating a danger of supply constraints, with negative consequences for both businesses and households (Box 2.1).

---

\(^{31}\) Shows the distance of each economy to the “frontier” or the best performance observed on each of the indicators across all economies. An economy’s distance to frontier is reflected on a scale from 0 to 100, where 0 represents the lowest performance and 100 represents the frontier.
Bulgarian businesses also have little trust in the country’s court system. According to the Special Eurobarometer, only 22 percent of Bulgarian businesses interviewed in 2013 believe that the court system is fair, impartial, and uncorrupted. Indeed, 58 percent of the general population, compared to an EU average of 23 percent, believes that the courts give and take bribes and that the abuse of power for personal gain is widespread. The Global Competitiveness Report 2014–15 ranks Bulgaria 126th of 144 countries for judicial independence and 110th for protection of property rights; it identifies corruption as the most problematic factor for doing business there. Among factors contributing to quality problems in the courts are manipulation of case assignments to judges; non-transparent procedures for appointment of judges; and the declining ability of independent media to hold the legislative, executive, and judicial powers accountable. Efficiency problems are also significant, as is reflected in court delays, case-load mismatches, judicial secondment practices, and fragmented case management systems.

99. **Fragmented and inconsistent municipal rules and systems create additional hurdles for businesses.** Duplication of documents and application inconsistencies generate considerable unnecessary interaction between businesses and administrators. Businesses are often required to collect information or documents from several different administrations before obtaining a given service. This heightens opportunities for rent-seeking and corruption. Further complications arise from the significant regional variations in procedures, documentation requirements, and the nature, cost, and delivery times of municipal services, even when services are the same. Finally, while most local administrations are computerized, there are unexploited opportunities to tighten administrative efficiency by reducing the paperwork or time it takes to administer a service, and moving beyond second-generation reforms based on websites that offer only basic information and application forms for specific services.
The quality of the business environment is reflected in the level of innovation, an area where Bulgaria is far behind. Bulgaria compares unfavorably with the average for the regional comparators in terms of such innovation inputs as R&D spending as well as outputs such as patents and high-tech exports. The R&D spending of Bulgarian businesses in 2013 was 0.43 percent of GDP, compared to 1.30 percent for the EU as a whole. In 2010 its share of innovating firms was the lowest in the EU (Figure 2.3). Similarly, the number of patents has been low by EU standards.

Box 2.1. Regulation in the Electricity Sector

The security of Bulgaria’s electricity supply is at risk, for policy, regulatory and governance rather than technical reasons. The country actually enjoys a comfortable supply/demand balance with power generation capacity exceeding peak demand by about 45 percent. Yet the power sector is on the brink of financial collapse. The biggest problem is the buildup of the arrears of NEK. By December 2014 liabilities of NEK are estimated to have reached BGN 3.3 billion. These accounts payable put at risk private sector generators, renewable energy producers, combined heat and power producers (including the district heating companies), and the three public electricity suppliers. The arrears result from inconsistent policies that require NEK to buy power from inefficient high-cost producers and supply electricity at regulated tariff rates that do not cover costs. Additional problems are associated with the lack of a functioning electricity market and reliance on auctions that are widely perceived to be noncompetitive. The basic provisions of the EU’s Third Energy Package were transposed into the Bulgarian legislation but actual implementation has been slow and market liberalization is still only partially completed.

How to solve these problems is well understood but doing so requires political will. It will mean restoring the independence of the regulator to set residential electricity tariffs. The arrears of major energy SOEs must be cleared and their governance improved by professionalizing their boards and top management and possibly offering shares in them on the stock market. First steps in strengthening the governance of the energy and water regulator have already been taken and include: (1) increased number and enhanced modus operandi of commissioners to ensure more effective and better informed regulation; (2) electing the commissioners by Parliament (instead of the Council of Ministers) to increase independence of the regulator; and (3) making most regulator meetings open to the public to enhance transparency of regulatory activities. In addition, to improve competition in the electricity market, the Bulgarian Energy Holding (BEH) established a power exchange, the Independent Bulgarian Energy Exchange, and plans to run day-ahead and intraday electricity markets by end 2015. Another positive development is the signed preliminary agreement between NEK and two independent power producers aiming to renegotiate the terms of the long-term power purchase agreements. Moving forward, it will be critical to build on progress so far and deepen the market reform agenda to financial stabilization and long-term viability of the energy sector.
There are three main reasons for limited innovation in Bulgaria: (1) the national innovation system lacks a coherent structure. The system’s concern with short-term goals does not lead to strong institutions and governance. (2) There is a lack of interventions by sector to boost innovation. The government rarely prioritizes sectors, and efficiency gains from Bulgarian innovation are therefore blurred. (3) Inadequate infrastructure for research and knowledge has led to a decline in scientific productivity. There is a bias toward basic research, which by its nature has limited applications; little synergy between research and teaching activities; and a concentration of high-quality research in Sofia to the exclusion of the rest of the country.

Boosting the innovation and R&D capacity of its firms will help Bulgaria to achieve growth that is not only faster but also smarter. Innovation could help Bulgaria move up the value chain, increase the sophistication of its exports, and support job creation. World Bank Enterprise Survey data indicate that innovating firms tend to grow faster in terms of sales, employment, and exports. For example, innovating firms experienced 8 percent annual growth in the number of employees while the workforce in non-innovating firms was stagnant. The propensity to export is also higher for innovative firms with foreign ownership.

Opportunities to improve the business environment and thus achieve faster growth are readily available:

- Establish a better regulation unit in the Council of Ministers with capacity to monitor and manage application of better regulation policies. This unit would be crucial to tighten intergovernmental coordination and align efforts to streamline regulations. The establishment of this unit is to be financed under Operational Program Good Governance.

- Enhance the effectiveness of the judiciary. The court system should be guided by a well-communicated strategy for the judiciary based on clear rules of professional ethics, supported by specific indicators for measuring performance and a disciplinary system to sanction breaches of conduct at all levels. The strategy should also be designed to reduce the inconsistency and unpredictability of court decisions and should overhaul the system for random allocation of cases. In early 2015, the Parliament approved an Updated Judiciary Strategy.
• **Enhance the effectiveness of vital regulatory bodies such as that for the energy sector.** The EWRC can be made more effective by streamlining its legal and institutional framework to enhance the credibility, independence, and capacity of the regulator. Initial steps have already been taken with changes to the Energy Law approved in March 2015.

• **Reduce the municipal administrative burden for businesses**, by, e.g., simplifying and unifying the most common procedures, documentation requirements, and service standards across municipalities and promoting use of e-services. A national scoreboard could be used to track the performance of municipalities in terms of the time and cost needed to comply with their regulations. Measures to reduce administrative burden at municipal level have been planned under the Operational Program Good Governance.

• **Stimulate smarter innovation by establishing a high-level public body mandated to coordinate innovation, research, and human capital policy.** Technology road-mapping could be introduced in major sectors such as information and communication, cultural and creative industries, pharmacy, mechatronics, and food processing to identify and design projects that could be initiated with EU funds and to improve coordination between line ministries on research and innovation policy. Measures have already been planned under the Operational Program Innovations and Competitiveness and Operational Program Science and Education for Smart Growth. The research and knowledge infrastructure should be built up by shifting the focus from basic research to commercialization, making scientific specialization responsive to the needs of economic specialization, and making research careers more attractive.

**Upgrading Skills**

104. **Upgrading skills is crucial to enhance productivity and employment and thus improve living standards.** With fewer workers to generate income in the future, it will be even more important that workers of all ages and ethnic groups have the cognitive, socio-emotional, and technical skills to improve their productivity at their current job or move to more productive jobs and sectors. A greater supply of skilled labor is likely to attract investments in more productive sectors with higher value added and thereby raise aggregate economic growth and help achieve external convergence. The high negative correlation in Bulgaria between educational attainment and poverty, labor force inactivity, and social exclusion demonstrates clearly that policies to improve education and skills development, especially for the bottom 40 percent of the population, can have a significant impact on reducing poverty and enhancing shared prosperity.

105. **Unfortunately, the quality of the education system has deteriorated,** as is clear from negative trends in student learning outcomes measured by international assessments. Between 2001 and 2011, Bulgaria fell from 4th to 22nd place on the Progress in International Reading Literacy Study (PIRLS) reading assessment of 4th graders and was among the only four countries that showed net declines of reading performance over the decade (along with Lithuania, the Netherlands, and Sweden). (NCES 2001, 2011). Between 2000 and 2012 the performance of Bulgarian 15-year-olds on the Program for International Student Assessment
(PISA) test (OECD, 2001, 2007, 2010, 2013) stagnated, while neighboring Turkey, Romania, and Serbia achieved better results even while spending less per student (PPP; Figure 2.4). About 43.8 percent of Bulgarian students aged 15 are functionally innumerate (scores below level 2) and have difficulty reading and understanding basic math and science problems (PISA 2012; Figure 2.5). In part, the decline in quality is due to such demographic challenges as an aging teacher population and a shrinking student population that have necessitated extensive school closures and mergers. The government has also implemented sweeping decentralization and efficiency-focused reforms in basic education. Despite these efforts, current quality trends will not support growth consistent with external convergence.

Figure 2.4. Bulgaria and Comparators: Distribution of Students by Proficiency in Math, 2012

Figure 2.5. Bulgaria: Distribution of Students by Proficiency in Math, 2006–12


106. **The declining quality of education has been exacerbated by deteriorating equity.** The equity issue is evident in the extreme disparities in educational outcomes between rural and urban students and between different types of schools, to the disadvantage of students from the bottom 40 percent. According to the PISA 2012 results, the urban-rural gap in learning outcomes in Bulgaria is the equivalent of two years of schooling. The gap between secondary students in the profiled academic track and those in the vocational track exceeds two years. The gap between students in the top economic quintile and those in the bottom quintile is the equivalent of three years of schooling. More than half the 15-year-old students in vocational schools (53.2 percent) are functionally illiterate (PISA 2012), compared to 28.6 percent in profiled secondary schools. While general profiled and non-profiled schools managed to improve their PISA performance over time in all three domains tested: reading, math, and science, the performance of vocational students remained unchanged in math and deteriorated in reading and science. The social stratification of schools (the tendency for students of similar socioeconomic characteristics to attend the same school) ranks highest in Bulgaria of all countries in the EU, and in the Europe and Central Asia (ECA) region covered by the 2012 PISA assessment (Figure 2.6). This grouping of students is a consequence of both the growing residential stratification of Bulgarian households and the very early ability-based selection of students, starting as early as grades 1 and 4 and becoming system-wide after grade 7.

---

32 OECD’s Program for International Student Assessment (PISA) measures the reading, mathematical, and scientific literacy and problem solving skills
Learning outcomes and education attainment vary considerably by ethnicity. NSI data from the 2011 Census show that about 70 percent of ethnic Turks and 93 percent of ethnic Roma do not complete upper secondary education, compared to 30 percent of ethnic Bulgarians and that 23.2 percent of Roma children aged 7–15 have never attended school, compared to 11.9 percent of Turkish children and 5.6 percent of Bulgarians. The PISA 2012 performance of the better-off students of Roma and Turkish ethnicity (those who have not already dropped out by 15 and were thus able to participate in the PISA tests) is significantly lower than the average for the Bulgarian students. According to PISA 2012 data, students from linguistic minorities lag behind Bulgarian-speaking students by an equivalent of 3 years of schooling in reading and 2 years in math and science.

Inequality of education in Bulgaria starts early, with too few children from poor families enrolled in early childhood programs. Despite the recent reforms that made preschool education compulsory for all children aged 5 and 6, the most vulnerable groups are still largely excluded due to inability to pay kindergarten fees and hidden costs. Exposure to early childhood education proves to be vital for children from lower socioeconomic backgrounds because they often lack a stimulating home environment and resources; this has implications for their development and opportunities over the entire lifecycle. PISA 2012 results for Bulgaria show that attending at least a 2-year preprimary education program increases PISA math scores by an average of 7 points relative to attending one year or none at all. The effect is greatest for children of low socioeconomic status (10 points on average) and students like Roma who speak a different language at home (19 points). Yet only 38 percent of Roma children aged 3–5 are in preschool, less than half the rate for non-Roma (82 percent). The regions in Bulgaria with the highest share of Roma population (Sliven, Pazardjik, and Yambol) have the lowest preschool enrollment rates.33

Teacher quality is the main school-based predictor of student achievement. Several consecutive years of outstanding teaching can offset the learning deficits of disadvantaged students (Hanushek & Rivkin 2010; Rivkin et al. 2005; Nye et al. 2004; Rockoff 2004; Park &

---

Hannum 2001; Sanders & Rivers 1996). The teacher cadre in Bulgaria is rapidly aging. Between 2007 and 2013 the share of teachers younger than 34 fell from 15 to 10 percent, and the share of those older than 55 went up from 17 to 30 percent. According to Eurostat, about 44 percent of Bulgaria’s spending on public education (1.5 percent of GDP) is allocated to wages, compared to an EU28 average of 48 percent (2.2 percent). The students who enroll in programs in education have the lowest university entry scores. There are also significant teacher shortages in a number of critically important subjects, such as foreign languages and ICT.

110. **Higher education in Bulgaria is geared to mass enrolment of students in public universities, often at the expense of program quality and relevance.** Bulgaria has too many small, specialized public higher education institutions (HEIs) but cannot supply a critical mass of researchers for all disciplines. Moreover, low HEI student-to-teacher ratios foster spending inefficiencies. Despite the recent launch of the Bulgarian University Ranking System34, which contains a wealth of information on employment of graduates, the quality assurance mechanisms used to accredit universities and their programs are focused heavily on inputs rather than on educational outcomes. Finally, public HEIs are run for the benefit of the academic staff rather than the public good, with all governance structures and decision-making concentrated in staff hands.

111. **A dearth of life-long learning opportunities limit workforce skill development.** At 1.7 percent in 2013, Bulgaria has the lowest participation rate in life-long learning (LLL) in the EU. This reduces the ability of workers to shift to employers, sectors, and regions with higher value added. Because the education system is not imparting the necessary cognitive foundation skills, Bulgarians are significantly less well-equipped for LLL than others elsewhere in Europe. For resource reasons the government tends to prioritize the creation of low-skilled jobs for quick mitigation of unemployment at the expense of strategic investment in LLL that could underpin longer-term employment and competitiveness. There are few partnerships between employers and public training institutions, and there are few incentives for LLL and vocational training providers to set and achieve learning outcome targets. Yet having an effective LLL system will be critical: the Roma, the long-term jobless, and NEET youth who have never worked will not be in a position to move to new jobs in new sectors and regions unless they acquire the necessary human capital. As demographic pressures mount, these deficiencies will undermine productivity and the numbers of active workers and will heighten the risk of poverty and exclusion.

112. **Opportunities are there to upgrade the skills of the labor force and thus achieve faster growth:**

- **Postpone ability-based tracking of students into profiled, general, and vocational tracks until compulsory schooling ends.** This would reduce the concentration of students with similar socioeconomic status and narrow the performance gap between schools. Peer learning would intensify as greater diversity in skills and abilities among students is achieved, and more effective teaching and learning strategies could be employed to improve learning outcomes. Finally, this structural change will increase student exposure to general education content (the present vocational curriculum has 20 percent less than general education), thus allowing for better training in general and basic skills.

---

34 Bulgarian Universities Ranking System- http://rsvu.mon.bg/rsvu3/?locale=en
• **Direct teacher policy to improving teaching quality and effectiveness.** In the next decade a large proportion of current teachers will retire. The resulting vacancies call for a comprehensive teacher policy that covers new entrants into the profession and entices the best students into university degree in education programs and holds those programs to higher standards to improve their quality; pre-service and in-service teacher training and qualification programs; a new remuneration framework for teachers that can attract and retain the most talented; and additional training, incentives, and support for effective teachers working in hard-to-staff schools, such as those with large shares of ethnic minorities.

• **Strengthen governance in higher education.** This requires reform of the decision-making structures in public universities, their funding model, and accreditation of institutions and programs. Current enrolment-based funding mechanisms could be replaced by multi-annual performance contracts with universities to foster quality and promote consolidation and merger of public universities. In parallel, the current model for management of higher education institutions could be revised to ensure that two-thirds of each university governing board is appointed from outside the university to represent such external stakeholders as employers, civil society, government, and labor unions. Merging accreditation of institutions and of programs could be considered, supported by measures that heighten the credibility of evaluations.

• **Expand LLL opportunities.** There is significant scope for Bulgaria to promote adult education and continuing training in partnership with the private sector. This would encompass both general and vocational adult education and continuing training (as well as further education for adults. Measures have been planned in this regard under the Operational Program Human Resource Development. With public resources scarce, LLL programs should target groups with greatest needs: the low-skilled, marginalized groups, and those with the least formal education and with literacy and numeracy problems. Moreover, promotion of greater involvement of the private sector in LLL programs is essential for ensuring greater relevance of training and for facilitating better labor market outcomes for participants.

**Upgrading Transport Infrastructure**

113. **Infrastructure, mainly road and rail,** is critical to boosting productivity and employment. Infrastructure influences the marginal productivity of private capital, reduces the costs of production, helps smooth labor mobility, and contributes to raising the quality of life (Kessides 1993). Improvements in the transport network can reduce costs to producers, investors, and traders and make Bulgarian firms more competitive by improving linkages between regions within Bulgaria and between Bulgaria and the rest of the world. This offers the potential for increased job opportunities for the bottom 40 percent of the population. Such

---

35 This section reflects a view that transport infrastructure has a greater impact on growth than such other forms such as irrigation, flood control, or water. It is also recognized that these three have enormous impacts on sustainability (for flood protection), allowing Bulgaria to meet its EU environmental obligations (water and waste), and creating opportunities for better jobs in the rural space where so many of the bottom 40 percent live (irrigation).
improvements could also enhance social and territorial cohesion and inclusion and delivery of social services, particularly to the bottom 40 percent of the population.

114. **Roads and railroads in Bulgaria are of poor quality and severely depress the competitiveness of Bulgarian firms.** The Global Competitiveness indicators show that while the quality of Bulgaria’s infrastructure has improved over the last several years, it is still far behind most EU countries (Figures 2.7 and 2.8). Delays in motorway and expressway construction have meant that, despite its strategic location, Bulgaria is not well integrated into the EU transport network. Although five of the nine EU transport network corridors pass through Bulgaria, the density of its motorways is still seven to eight times lower than in most older EU member countries and just half that of other regional comparators. The quality of railroad infrastructure is also undermined by substantial inefficiencies caused by overcapacity and inadequate governance. Only half of the 4,072 km of rail lines in Bulgaria could be considered to be a financially sustainable core network. Keeping uneconomic lines in operation dilutes the already thin resources for maintenance, traffic control, station operations, and security rather than investing in quality improvements.

![Figure 2.7](image1.png) **Figure 2.7. Road Quality, 2014–15**
(1st-the best, 144th-the worst)

![Figure 2.8](image2.png) **Figure 2.8. Railroad Infrastructure Quality, 2014–15**


115. **Not only are Bulgarian roads in poor condition, there are serious problems with road and bridge safety.** Nearly 35 percent of all roads (motorways, class I, II, and III roads, and road junctions) are in urgent need of maintenance and rehabilitation, especially class III roads. A significant number of bridges are in state of serious disrepair. The last completed audit of structures in 2005 found that 36 percent of the bridges audited in the main road network were in urgent need of rehabilitation. It also found that 193 structures, 15 percent, had at least one defect that needed immediate repair. The poor quality of roads and bridges results in loss of economic opportunity because it deters businesses from setting up in rural areas. Bulgaria has made some progress in reducing road fatalities (from 1,058 in 2008 to 658 in 2011), but the death toll is up to three times that of the top-performing EU member countries and well above the average.

116. **The road condition and safety problems are a result of insufficient spending on maintenance, especially on class III roads and bridges.** From 2007 to 2012 maintenance spending actually fell, from 0.57 percent of GDP to 0.26 percent. On account of this neglect, the value of these assets is rapidly depreciating. All initial capital investments will be totally lost if this is allowed to continue. Timely structural maintenance and repair that are well-planned and conducted with minimal disruption to road users can bring significant time and
cost savings to both bridge owners and road users, as well as producing long-term budgetary savings.

117. **Bulgaria’s road system suffers from chronic underinvestment.** As a share of GDP, Bulgaria invests much less in construction and maintenance of roads and bridges than all other regional comparators. Elsewhere in the EU investment is relatively low, but their road network systems are mature and they have already made their most capital-intensive road investments. Bulgaria needs to invest more to catch up with regional comparators and to enhance the competitiveness of Bulgarian firms.

**Figure 2.9. Investments in Roads, Percent of GDP**

![Investments in Roads, Percent of GDP](image)

*Source: ITF, EC, WB, Road Investment Agency*

118. **Due to its legacy of underinvestment, Bulgaria’s medium-term plans call for a significant increase in investment in road infrastructure:** The government plans to invest BGN13 billion over seven years, close to 2.3 percent of GDP a year (Table 2.1). These budgeted amounts would complete the main international transport corridors but would only be sufficient to maintain the current condition of the internal road network, of which only 65 percent of national and 35 percent of municipal roads are considered to be in fair or good condition. World Bank calculations show that this would widen the financing gap by 20 percent over five years. The gap could turn out to be much larger, depending on whether EU funds could be used; there is also uncertainty about the state subsidy to the Road Agency.

**Table 2.1: Investment Policy Choices**

<table>
<thead>
<tr>
<th>Policy Choices</th>
<th>Effect on the System</th>
<th>Budget 2014-2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable development</td>
<td>Improvements in current condition and development of the international transport corridors</td>
<td>BGN 20 Billion</td>
</tr>
<tr>
<td>Current condition</td>
<td>Status quo with development of the main international transport corridors</td>
<td>BGN 13 Billion</td>
</tr>
<tr>
<td>Fiscally constrained</td>
<td>Status quo with limited development of international transport corridors</td>
<td>BGN 9 Billion</td>
</tr>
</tbody>
</table>

*Source: Bulgaria Road Strategy*

119. **If managed effectively, the railways can make a significant contribution to Bulgarian growth,** for at least three reasons: (1) there are market segments for which transport by rail will remain competitive (particularly long-haul international). (2) Railways can help
expand regional trade, boosting Bulgaria’s competitiveness. (3) A competitive financially sustainable core rail network is necessary to link Bulgaria with the trans-European rail network.

**Figure 2.10. Bulgaria: Rail and Road Transport Trends**

120. The rail system faces profound restructuring challenges and, despite major steps in this direction, the process is only partially complete. Demand for rail transport has plunged since 2008 (Figure 2.10) and is not expected to regain pre-crisis levels in the foreseeable future. Despite considerable efforts by management since 2010, which have included large staff reductions, passenger service cuts, and disposal of non-operational assets, the Bulgarian State Railways Company and its freight and passenger subsidiaries are now insolvent. The National Railway Infrastructure Company’s tenuous financial position and inefficient operations consume an increasing government subsidy.

121. Past reforms transformed the railway industry structure to comply with EU Directives, but they have not brought needed commercial management practices to the state-controlled railway companies. Elements of the old planned economy linger in the relationship between railway undertakings. Creditors expect that the government will bail them out rather than let them fail. The lack of commercial management and a business culture (railway productivity is among the lowest in the EU) in addition to an extensive network has led to a rigid railway industry unable to adapt to a changing market.

122. There are opportunities to upgrade the quality of transport infrastructure and thus achieve faster growth:

- **Invest more in maintenance, rehabilitation, completion of the EU road network, and road safety**, based on sound public investment management practices, supported by extensive monitoring and evaluation of projects. Decisions to maintain and rehabilitate roads should be based on a comprehensive Road Asset Maintenance System that is regularly updated. Given its impact on the poorest, implementing the Road Safety Action Plan should also be a priority.

- **Strengthen governance of roads and railways**. Infrastructure agencies, such as the Road Infrastructure Agency and the National Company Strategic Infrastructure Projects should be consolidated to reduce fragmentation of management. For railways, the Public Service and Multiannual Infrastructure Contracts need to be adjusted to market
demand and public resources; better mechanisms to control expenses should be put in place.

- *Optimize the rail network.* To increase rail transport productivity, uneconomic lines need to be closed down and removed and the staff downsized. The challenge is to carry out a railway reform program that improves service, especially on European corridors, while keeping funding for railways fiscally sustainable and implementing the EU framework for railways.
3. **Opportunities for More Inclusive Growth**

123. **Faster growth alone is not sufficient to make growth more inclusive.** Given the current demographic dynamics, the country cannot afford to deprive anybody of access to economic opportunities, especially those who have been left behind. Inclusive growth also ensures that the reform agenda is socially sustainable and politically feasible. The recent political instability and the continuing emigration of young people suggest that measures should be taken to expand opportunities for the bottom 40 percent of the population and to make government more effective in delivering services by, e.g.,

- Helping members of the bottom 40 percent of the population to be more mobile and to participate more in the economy.
- Ensuring better access to health services and long-term care.
- Making SSNs and labor market policies more effective.
- Expanding the inclusiveness of the pension system.

**Increasing mobility and economic participation for the bottom 40 percent of the population**

124. **In the bottom 40 percent of the population there are significant and persistent enclaves of people who suffer long-term, even multi-generational, social and economic exclusion.** People in the bottom 40 percent of the population find it very difficult to escape. This is partly due to the fact that some population groups are simply excluded from economic opportunities; excluding any large group is damaging for growth. In the case of Bulgaria, which is undergoing the steepest decline in working age population in the world, it is economically and socially unaffordable. Providing more equal opportunities for all individuals to realize their potential throughout the lifecycle is essential for not only inclusive but also aggregate growth.

125. **Promoting social mobility starts with better and more inclusive education.** The bottom 40 percent of the population have significantly lower educational attainment and skills levels than the rest of the population. What is worse, Bulgaria’s education system today is highly inequitable and cements social immobility, as discussed in Chapter 2. Chapter 2 discussed key recommendations to make Bulgaria’s education system more equitable, including the expansion of access to early childhood development programs; postponing ability-based tracking of students into profiled, general and vocational tracks; and improving teaching quality.

126. **The enduring nature of these enclaves is in large part attributable to fixed patterns of labor force status.** A large number of the bottom 40 percent of the population is unemployed or outside the labor force. Those who do work tend to work few hours, in elementary, low-paid occupations. Moreover, individuals in the bottom 40 percent find it difficult to change their labor force status, which condemns them to permanent membership in the bottom 40 club.

127. **Labor force participation is relatively low in Bulgaria, especially for young people.** Bulgaria’s participation (based on population aged 15-64) was 68.6% in 2013 and as such is in the bottom third of EU countries and below the EU28 average of 72.1 percent. It also has the fourth lowest participation rate for those aged 15–24 (Figure 3.1). In part, low youth participation reflects a culture of predominantly full-time work in Bulgaria. Whereas in other
EU countries young people combine studying with part-time work, only an estimated 4 percent of youth in Bulgaria do so, compared with, e.g., almost 40 percent of youth in Slovenia and 75 percent of youth in the Netherlands (Dimitrov 2012).

Figure 3.1. Bulgaria: Participation Rates Relative to other EU Countries

![Bar chart showing participation rates]

Source: Eurostat.

128. Since 2008, there has been a dramatic rise in joblessness among young people. In 2013 Bulgaria had the highest NEET rate (a measure of the share of youth aged 15–24 who are not engaged in education, training or employment) among regional comparators and the second highest in the whole EU after Italy. Bulgaria’s NEET rate rose from 17.4 percent in 2008 to 21.6 percent in 2013; the EU average is 13 percent (Figure 3.2). Youth unemployment went up from 12.7 percent in 2008 to 28.4 percent in 2013. Inactivity in this age group is much higher than in the rest of the EU, mostly because of Roma inactivity, especially among Roma women: The Roma NEET rate is close to 50 percent compared to 20 percent for non-Roma populations.

Figure 3.2. Bulgaria and Regional Comparators: NEET Rates, 2008 and 2013

![Bar chart showing NEET rates]

Source: Eurostat, EU-LFS.

Note: The NEET rate = the percentage of the population aged 15–24 not employed or in an education or training program.

129. The Roma, and to a lesser extent ethnic Turks, are much more likely to be unemployed or inactive than ethnic Bulgarians. According to BLISS data, only 25 percent of respondent Roma of working age are employed (Figure 3.3), 34 percent are unemployed, and 32 percent are not in the labor force or are inactive. This is consistent with previous findings.
that the Roma are likely to experience higher unemployment and inactivity. With these high rates, more than 85 percent of Roma are in the bottom 40 percent of the population compared to only 31 percent of the entire population. Moreover, a substantial proportion of out-of-work Roma live in jobless households, which suggests that their vulnerability to poverty is closely connected to poor labor market outcomes. The situation with the ethnic Turks is better, even though their unemployment and inactivity rates are almost double those of ethnic Bulgarians. Including the ethnic minorities in the growth process is vital to reducing poverty and boosting shared prosperity because over the next 20 years every fourth new labor market entrant is expected to be Roma (Laat and Bodewig 2011).

Figure 3.3. Employment Outcomes by Ethnicity

Source: BLISS.

More Roma are jobless for several reasons. One factor is lower average education: only 14 percent of Roma in Bulgaria have completed secondary education, compared to 85 percent of the rest of the population. The education gap starts early in life: as discussed in chapter 2, only 38 percent of Roma children aged 3–5 are enrolled in preschool, not even half the 82 percent rate for non-Roma; this is in spite of international evidence that attending preschool increases an individual’s chance of achieving socioeconomic inclusion later in life, particularly for children from disadvantaged backgrounds. Moreover, employment offices may not give Roma adequate support in their search for employment. Among BLISS survey respondents, 16 percent of Roma said they did not search for work because they “believe there is no chance of getting a job,” compared to 2 percent of other respondents. Similarly 36 percent of jobless working-age Roma said they were not registered with employment offices because they “don’t believe it’s worth it,” compared to 23 percent of the jobless non-Roma who answered this question. Roma are much more likely than non-Roma to be long-term unemployed or to be employed in informal activities.

Gender patterns of labor force status affect mobility and economic participation. Employment rates for women are lower than for men and the gap for young women is particularly pronounced. Just 22 percent of Bulgarian women aged 15–24 are employed, against a European average of 32.7 percent. Another large employment gap emerges for women aged 60–64. These gaps could reflect long maternity leave in Bulgaria of 410 days, one of the longest in the world, and a retirement age for women that is three years earlier than for men. Difficulties in finding child care and long-term care facilities are also likely to be factors.

36 For example de Laat 2010, sampling high-density Roma areas, found unemployment and inactivity rates among the Roma two to three times higher than in the general population. A 2012 World Bank study using Crisis Monitoring Survey data found that during the 2008-09 global financial crisis, the Roma respondents suffered disproportionately from deteriorating labor market conditions, with job losses almost four times those of ethnically Bulgarian households (World Bank 2012).
Activity rates for Roma women are nearly 50 percent, 27 percentage points lower than for ethnic Bulgarians; the rates for ethnic Turkish women are 11 percentage points lower than for ethnic Bulgarians. Roma women are increasingly expected to step in and work outside the community to fill the economic void created by unemployed men, even by migrating to another country (World Bank 2013i).

132. **Several interrelated forces are conspiring to lock in patterns of immobility.** For instance, employment growth since the crisis has been in sectors that rely on high-skilled labor, such as information and communication, business services, and financial services. This shift in demand has not been accompanied by changes in education and training programs. The result is a widening gap between the unemployment rates among well-educated and poorly-educated Bulgarian workers. Employer surveys have found an emerging skills mismatch, not just in terms of technical or cognitive skills but also in socio-emotional skills, motivation, and effort (Manpower 2013). 37 This contributes to long-term unemployment shares of total unemployment that are about 10 percentage points higher in Bulgaria than in the EU generally. Prospects for better integration of potential workers into employment are dampened not only by high NEET rates but also by deepening regional disparities in unemployment and by social isolation.38

133. **Active labor market programs and other employment-related services are under-funded and under-utilized.** A greater potential role for labor market policy is implied by the observed shift in demand toward more skill-intensive sectors and by a long-term trend toward labor market polarization, where highly skilled and elementary occupations are growing and middle-skill occupations are declining (Autor 2014). In contrast to an average OECD spending on labor market policies of 1.44 percent of GDP in 2011, Bulgaria spent only 0.59 percent on Public Employment Service administration, active labor market policies, and unemployment and early retirement benefits combined (Figure 3.4). In fact, spending on active labor market policies has declined continuously since 2004, with a particular cutback in spending on active labor market policy following the global financial crisis in 2009. Some of that spending from the national budget has since been replaced with funding from the European Social Fund, which allows for more program flexibility but also increases administrative burdens on public employment services.

134. **Bulgaria’s active labor market programs and employment-related services are struggling to reach disadvantaged groups.** In recent years, Bulgaria has drafted an Employment Strategy and Youth Guarantee Implementation Plan that prioritize activation of unemployed people from disadvantaged groups. However, no tangible results have yet been achieved. The main problems are: (1) too little attention to second-chance (non-formal) education and training initiatives for the very high numbers of early school leavers; (2) insufficient outreach to the NEETs and too few mechanisms for encouraging their registration; and (3) few measures specifically targeted at the very low skilled, which include a high share of the Roma population (EC 2014).

37 The Manpower Group’s 2013 Talent Shortage Survey found 54 percent of employers in Bulgaria having difficulty filling jobs with the right candidates, up from 42 percent in 2011. Furthermore, 32 percent of employers cited lack of “hard” job skills or technical skills, 16 percent a lack of right values and mindset, and 15 percent a lack of “soft” skills or interpersonal and communication skills as reasons for their difficulty in filling specific jobs.

38 According to administrative data, municipal unemployment rates at the end of 2012 varied between 1.8% and 63%. Variations were similar during the pre-crisis growth period, but differences increased during the crisis.
135. **Differences between the main groups of unemployed suggest ways to prioritize and to shape specific labor market policies.** In World Bank (2014i), latent cluster analysis using EU-SILC data revealed several distinct out-of-work groups (Table 3.1). Four clusters of the population stand out with high and medium activation needs, because of their poverty, and high and medium activation potential, in terms of their ability or motivation to be in the labor market: (1) middle-aged unemployed; (2) single male NEETs; (3) low-educated rural long-term unemployed; and (4) stay-at-home young mothers. Customized labor market services can improve the situation of these groups. For example, middle-aged unemployed, who are relatively well-educated compared to the other groups, can be targeted with job search assistance. Single male NEETs, mostly aged 16–24, require urgent policy attention due to the potential adverse consequences of their detaching from the labor force when relatively young; they might benefit from training in the higher-order cognitive and socio-emotional skills that are in increasing demand. The BLISS results cited earlier suggest that there may be demand from young adults for training in current or new specializations in order to get better jobs. Given that 69 percent of “rural low-educated long-term unemployed” are in the bottom quintile of the income distribution, a priority action for this group is to reduce their vulnerability to poverty and ensure inclusive growth by providing more basic literacy and second-chance education services. Finally, activation of stay-at-home mothers can be facilitated by offering accessible and quality childcare services and by reconsidering the length of maternity leave, since the current duration may well make their return to work harder.

<table>
<thead>
<tr>
<th>Group</th>
<th>Share (%)</th>
<th>Activation Need</th>
<th>Activation Potential</th>
<th>Priority for Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle-aged unemployed</td>
<td>23</td>
<td>Medium</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Stay-at-home young mothers</td>
<td>15</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>Single male NEETs</td>
<td>15</td>
<td>High</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>Low-educated rural long-term</td>
<td>12</td>
<td>High</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>unemployed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retired and early retired men</td>
<td>13</td>
<td>Low</td>
<td>Medium</td>
<td>Low</td>
</tr>
<tr>
<td>Retired women</td>
<td>19</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Low-educated retired and disabled</td>
<td>3</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
</tbody>
</table>

*Table 3.1. Activation Priority for Out-of-Work Clusters*

There are opportunities to increase mobility and economic participation and thus achieve more inclusive growth:

- **Customize labor market policies to specific groups of jobless.** Type of intervention can be tailored to the unique needs of each priority cluster.

- **Increase investment in the coverage and quality of active labor market policies.** Investments should be targeted to specific vulnerable and poor groups, such as benefit recipients, youth, and ethnic minorities. It should be directed to improving the general capacity of the Public Employment Service (PES), and activating linkages for social assistance administration, for example building close partnerships with employers and integrating currently fragmented services.

- **Expand early childhood development programs and provide accessible and affordable child care.** This will be important for bringing young mothers into the labor market, but as noted in chapter 2 it is even more vital for the children, especially those from poor households. An effective program should: (1) make preschool education free and compulsory for all children aged 3–6, with special measures to attract full participation of Roma and other vulnerable children to preschool before they enter primary education; and (2) expand the scope, coverage, and quality of public child care for children aged 0–3, targeting attention to vulnerable children and their parents.

- **Improve incentives for maternity leave.** Reviewing the length of the granted maternity leave against international best practice and a more equitable distribution of early childhood responsibilities between mother and father could help improve female labor force participation and avoid skill loss among mothers.

**Ensuring Access to Health and Long-term Care**

Better access to quality health and long-term care services is critical for inclusive growth and for improving the welfare of the bottom 40 percent of the population. Health problems make it difficult for many to participate in the labor market, either because such problems prevent them from working productively or they have to take care of a seriously ill or elderly family member. It appears that women’s activity in the labor market is limited by the disproportionate burden they carry in providing informal care to the elderly. BLISS (2013a) found that 41 percent of women and 23 percent of men, who were not working full time for family reasons, would work more hours if affordable care were available for ill, disabled, and elderly people. By preventing unnecessary deaths and extending the lives of the workforce, good health care can help stem the labor force decline and improve quality of life. The poor have more health problems because of poorer nutrition and living conditions. They also have difficulty affording medicines, doctors’ visits, and LTC.

Insufficient access to quality health care has depressed health outcomes for Bulgarians relative to other EU countries. In the 1980s, health outcomes in Bulgaria were closer to the old-EU average than in most neighboring countries. For instance, life expectancy in Bulgaria was three years less than the EU15 average but two years more than in Hungary.

---

39 Education and training issues are considered in chapter 2 and social safety net issues covered in chapter 3.

40 EU15 covers all “old” EU member states that acceded before 2004.
Today, the gap between Bulgaria and the EU15 is close to eight years, and at 73, life expectancy in Bulgaria is lower than in Hungary. Diseases of the circulatory system are a particular problem in Bulgaria: The mortality rate for circulatory diseases of Bulgarians younger than 64 is higher now than in 1980 even though in most other countries the rate has decreased. In 2010, mortality from circulatory diseases in Bulgaria for people 64 or younger was five times the EU15 average and 65 percent above the average for regional comparators.

139. **The health care system is not efficient.** It is skewed toward expensive hospital-based care, with suboptimal use of more cost-effective preventive services and primary care. The World Bank (2013c), shows that coverage of most preventive services is much lower than in other EU countries, except Romania. Bulgarians also have fewer contacts with both primary care and specialist physicians than citizens in other EU countries. Meanwhile, the number of hospital stays per capita shot up 65 percent between 2000 and 2010, a period when hospitalizations in other countries were holding steady or dropping. In 2011, the rate was so high that in effect one in four Bulgarians was hospitalized.

140. **The hospital system is very fragmented.** There are 4.6 hospitals per 100,000 population against an EU average of 2.7. Many hospitals have very low throughput, which is highly inefficient. Figure 3.5 ranks the 275 facilities by number of patients discharged each month. The three busiest hospitals discharge more than 95 patients a day, yet the 103 facilities at the other end of the spectrum combined account for just 5 percent of hospital stays, which means that about one in three hospitals in Bulgaria discharges at most 5 patients a day. This fragmentation leads to duplication of resources across facilities and makes it difficult to exploit economies of scope and scale, as most modern health care requires. It also makes it difficult to appropriately target needed investments.

**Figure 3.5. Distribution of Monthly Hospital Patient Discharges**

![Graph showing hospital patient discharges](image)


141. **The current financing methods of the health care system are leaving increasing numbers at risk of poverty.** In 2012, around 8 percent of GDP was spent on health care in Bulgaria. When put in perspective with countries of comparable income, total health expenditure is above average and public expenditure is average. Out-of-pocket (OOP) payments represent 47 percent of total expenditure, an increase of 20 percentage points since 1995. These payments are the single largest source of financing in the health system. Bulgaria has a long way to go to meet the WHO criterion for adequate financial protection, which specifies a ceiling of 15-20 percent for OOP payments as a proportion of total health spending.
The financial protection provided by the health care system is incomplete and has eroded. Between 7 and 12 percent of Bulgarians who do not live abroad permanently are uninsured. The vast majority of them are vulnerable non-working people with lower socio-economic status. The high level of OOP payments considerably limits financial protection for all Bulgarians. 5.3 percent of households’ budgets were spent on health in 2013. This is high compared to the 3 percent average in Western Europe. More than 4 percent of the population is impoverished each year due to OOP payments. In 2013, three quarters of out-of-pocket payments were spent on medicines, which are not well covered by the public health insurance system, but necessary for managing chronic diseases which increase with aging.

142. **Provision of LTC services is currently low, but demand for them is likely to burgeon as the population ages.** The share of the population highly dependent on LTC seems low compared to other EU countries: 0.7 percent of those aged 16–24, 14.5 percent of those aged 75–84, and 23.9 of those aged 85 or more. In Bulgaria most LTC is provided informally by families. Actual spending on LTC, mostly public, was estimated at just 0.2 percent of GDP in 2012, but costs could become catastrophically high with rapid population aging and fewer working people. The cost rise could be offset by increases in life expectancy but over the next quarter century the disproportionately large cohort of baby boomers will constitute the majority of Bulgaria’s elderly population. By 2075 the number of elderly is projected to increase by 60 percent and this is expected to increase the demand for long-term care services, as the supply of informal care is expected to shrink. Overall, the number of people requiring health care and LTC will have heavy economic and fiscal implications for the country as a whole.

143. **Access to health care and LTC create opportunities to achieve more inclusive growth:**

- **Reorganize the hospital system**[^41]. A technically-driven hospital rationalization plan should support reorganization while maintaining access to care. The National Health Insurance Fund needs to be able to purchase services selectively, i.e., it should be allowed to decide which entities it can contract. Information on the quality of care needs to be generated, collected, and publicized and hospital payment systems reformed. Emergency care may also need to be reformed.

- **Strengthen alternatives to hospital-based care.** Primary care professionals need greater capacity to manage the burden of disease and to coordinate patient care. Effective and continuous medical education should be put in place. Regulations and incentives need to be adjusted to expand management of chronic conditions in primary care. Payment systems and accountability mechanisms need to be adjusted across all types of providers (primary, ambulatory, emergency and hospital care) to ensure patients are treated at the right level of care.

- **Improving purchasing efficiency for medicines.** The current methods for pricing medicines and selecting which should be reimbursed do not guarantee value for money. Current policy settings do not promote competition in the generic market and many prices for generic and name-brand medicines compare unfavorably with wealthier countries. Several high cost medicines are unlikely to be cost effective in Bulgaria and should be subject to price (re)negotiation, tight restrictions on use, and in some cases,

[^41]: The government has taken steps in this regard recently with the approval of the draft amendments to the Medical Establishment Act by the Council of Ministers.
delisting. Being able to encourage greater competition in the generic medicines market could improve efficiency in pharmaceutical expenditure.

- **Emphasize community-based LTC services.** Bulgaria should promote community centers that provide a range of LTC and rehabilitative services rather than expensive institutional care. Communities house day-care centers for elderly and disabled people (or even children) and also offer outpatient services like physical therapy. Such centers could host home-based services, such as care assistants or community nurses who support dependent people in their homes. They could also provide limited facilities for residential care.

**Making Social Safety Nets More Effective**

144. **Effective SSNs are essential for Bulgaria given the large share of its people who are at risk of poverty or social exclusion.** Robust social safety nets can protect the poorest individuals from destitution, increase resilience to systemic and idiosyncratic shocks, and promote accumulation and utilization of human capital, thus enabling more inclusive growth (Grosh et al. 2008). Inclusive and effective social safety nets can facilitate adoption of difficult economic reforms as well as increase the political sustainability of such measures. Despite increasing economic hardships to the poor since 2008 and the increasing number of jobless, SSNs have become less effective in protecting the poor and vulnerable.

145. **Bulgaria’s SSN system comprises several categorical and means-tested programs.** Bulgaria provides noncontributory assistance to about 40 percent of its citizens through four major programs: (1) a means- and asset-tested last-resort Guaranteed Minimum Income (GMI) scheme, the objective of which is to protect the poor and vulnerable; (2) a means-tested heating allowance to protect vulnerable groups from increases in energy and heating prices during winter; (3) a means-tested monthly child allowance and smaller programs for families, some of which are means-tested and others universal; and (4) social pensions for old age and disability. Although there is a certain level of fragmentation in the SSN system, GMI and heating allowance use similar targeting mechanisms and the same certification process.

146. **Since the mid-2000s, Bulgaria has reoriented its SSN away from last-resort social assistance and the heating allowance and toward the monthly child allowance.** Between 2005 and 2013 spending on the GMI fell by about one-third and on heating allowance programs by about two-thirds (Figure 3.6). Concurrently, the number of beneficiaries of both programs fell by half. Spending on these two programs was notably procyclical, which reduced their role as shock buffers during the crisis. At the same time, total spending on social assistance has fluctuated within a relatively narrow band since 2005. Resources taken from the GMI and the heating allowance were reallocated to the monthly child allowance, spending on which has risen by 20 percent since 2005. As the number of beneficiaries of child allowance has been decreasing, its value per beneficiary has gone up.
Bulgaria’s SSN system can improve on its fulfillment of the mandate to protect the poor and vulnerable. The social assistance modules of the 2010–11 Crisis Monitoring Survey and its continuation in 2013 as BLISS allow for examination of most SSN program coverage, targeting, generosity, and impact on income poverty and inequality.\(^\text{42}\)\(^\text{43}\) This analysis focuses on the achievement of the poverty reduction objective of several SSN programs while acknowledging that some of these programs (such as the benefits supporting families) were not designed with this explicit objective. In 2013, only 7 percent of the bottom 20 percent of households received the GMI and only 18 percent received the heating allowance (Figure 3.7). The coverage of these programs has improved only marginally since 2010: from 4.5 percent for GMI and 13 percent for the heating allowance. Although the GMI and heating allowance are very well-targeted to the poor (as shown in Figure 3.8), low coverage combined with modest benefit sizes greatly reduces their impact on poverty and inequality.\(^\text{44}\) On the other hand, the monthly child allowance reached more low-income households (39 percent of the bottom quintile in 2013, down from 40 percent in 2010). Despite the means test, its resources are not spent efficiently: in 2013 44 percent of all benefits went to the top 60 percent, up from 41 percent in 2010 (Figure 3.8). The system does not protect the poor and vulnerable from shocks to income or consumption, such as energy price increases, this is especially true for those without children.

\(^{42}\) The welfare aggregate in BLISS is household income per adult equivalent, the usual caveats for income-based (rather than consumption-based) welfare aggregates apply here.

\(^{43}\) For the purposes of the analysis, only means-tested monthly child allowance is covered; thus, the analysis below does not refer to other types of family benefits granted under the Family Support for Children Act of 2002.

\(^{44}\) The finding of low coverage and modest benefit amount of GMI and heating allowance in 2013 with BLISS data echoes the earlier findings using the 2007 Multi-topic Household Survey (World Bank 2009).
148. **Stringent GMI eligibility criteria for the working-age unemployed and GMI’s relatively low value prevent the program from fully buffering shocks to income or consumption.** There are both income and asset tests for GMI eligibility. Working-age unemployed applicants must be registered at the PES for at least six months. This long waiting period refutes the logic of a last-resort social assistance program, especially for those who may not qualify for unemployment benefits. GMI recipients must also participate in uncompensated part-time public works ("From Social Assistance to Employment" program) for a minimum of 14 days a month (up from 5 days in 2010). This requirement may have reduced GMI take-up even further, as it can interfere with other productive activities and job search. The value of GMI benefits has declined relative to wages: in 2012, GMI for a single person represented 23 percent of the minimum wage, compared to 30 percent in 2007.

149. **Bulgaria’s SSN system does not fulfill its mandate to promote accumulation and use of human capital.** The employment promotion aspect of the SSN system is not working: GMI participation is not linked to activation or work incentives. Recent findings from a World Bank study on the activation of vulnerable groups in Bulgaria (Dimitrov and Duell, 2014) confirmed that the GMI participation program is generally handled in a traditional “social assistance” way, with social workers more concerned about enforcing asset and income tests than providing activation and linkage to social services. The absence of a law which would allow concurrent part-time employment adds further barriers to entry-level employment (EC 2013b: 24). Social assistance administration is not geared to activation of working-age beneficiaries or enabling employment. Obligations are strictly enforced but consist mainly of participating in public employment duties.

150. **Active labor market institutions and social assistance services are also highly fragmented.** Responsibility for activating policies and services is divided between the PES, the Social Assistance Agency, the National Social Security Institute, and such other agencies as the Ministry of Education and Medical Commissions. The current collaboration between these agencies is mostly limited to enforcing rules and cross-checking programs. Strict enforcement of asset and income tests for GMI beneficiaries further reduces the incentive for formal work. Recent focus group discussions (FGD) with employers, jobseekers, and PES officers have shed light on some governance issues. Greater transparency and stronger

---

**Figure 3.7. Coverage of Selected SSN Programs, 2013**

**Figure 3.8. Benefit Incidence of Selected SSN Programs, 2013**

*Source: World Bank staff calculations based on BLISS (2013a).*
accountability mechanisms are required: for example, in rural areas FGD participants reported that some employers do not pay negotiated wages and that working conditions are not safe. These employers reportedly still expect the PES offices to send them workers and apparently enjoy administrative and political “protection” from elected officials at various levels of government.

151. **There are three concrete measures to make SSNs more effective and thus achieve more inclusive growth:**

- *Relax GMI eligibility criteria and increase benefits.* Relaxing some of the stringent eligibility criteria would improve the extremely low GMI coverage and its excessively narrow targeting. This could be accomplished by: (1) eliminating the 6-month waiting period; (2) alleviating the strict requirement for public works; and (3) raising the income threshold or dropping the asset tests. Any of these would likely increase coverage. Raising the benefit amount, which in recent years has declined relative to minimum and average wages, would also make the GMI more attractive to potential beneficiaries. One option might be to automatically index the benefit to inflation.

- *Reintroduce the in-work benefit in the GMI scheme.* The in-work benefit can improve labor force participation and reduce the vulnerability of the poorest Bulgarian households. According to Dimitrov and Duell (2014), GMI had an earnings disregard in the first half of the 1990s. However, due to a lack of institutional capacity to administer it, the in-work benefit was abolished. By offering an in-work benefit schedule to low-productivity wage-earners, Bulgaria could alleviate the current regressive effect of the minimum social security thresholds. Moreover, allowing GMI recipients an opportunity to work in the formal sector without losing their benefits would reduce both their current and future vulnerability to shocks, given the low value of the GMI benefit and the greater employability they would gain through work experience.

- *More closely link the GMI and the PES to facilitate activation of social assistance beneficiaries.* Bulgaria could tighten the case management and institutional connections between social assistance offices and local and regional PES offices.

**Making the Pension System More Inclusive**

152. **Pension inclusiveness is undermined by low benefits and limited coverage, low contribution rates threaten the sustainability of the system.** Pension coverage of today’s working-age population fell after 1990 and has been stubbornly low since, reducing the role of the public pension system in providing income for the elderly and raising their risk of poverty. Although benefits are relatively modest, current contribution rates are so low that substantial transfers are required from general revenue. Channeling state budget resources to the pension system will tend to redistribute wealth from the unsubsidized poor to the subsidized wealthier population. This would raise serious equity concerns for the bottom 40 percent of the population. Given the expected demographic trajectory and pension system parameters, efforts to maintain or heighten inclusiveness will create implicit liabilities for the general budget and the likely large future increases in transfers will have clear implications for sustainability.
153. Worsening demographics and low pension contribution rates are challenging the fiscal sustainability of Bulgaria’s public pension system (Figures 3.9 and 3.10). The public pay-as-you-go (PAYG) scheme, the main component of Bulgaria’s pension system, was built on the premise of the current working-age population paying enough to finance current pensioners. However, the ratio of pension beneficiaries to contributors, the pension system dependency rate, has been steadily deteriorating: there are currently only 1.2 contributors for each elderly person. Yet in 2012 the number of insured people was 2.8 million and the number of pensioners was 2.2 million. As a result, deficits have been increasing steadily; in 2012 they reached 47 percent of pension spending, 5.8 percent of GDP. Another reason for this outcome is a largely failed attempt to formalize the labor market through drastically reduced contribution rates, a process that started in 2006.

![Figure 3.9. Projected PAYG Dependency Rate](source: PROST projections based on 2011 data.)

![Figure 3.10. Financial Performance of the PAYG Pension Scheme](source: NSSI. Note: Contribution revenue does not include state contributions.)

154. Less pension coverage means heavier future reliance on social assistance. Attempts to boost coverage by lowering the pension contribution rate had little success; in 2006 the contribution rate was drastically reduced, by 6 percentage points, to one of the lowest levels in the EU and only about 55 percent of the working-age population contributes monthly. Such sporadic contribution patterns are projected to result in only 70 percent pension coverage among future elderly. The remaining 30 percent will have to rely on a social pension, family, or personal savings. In contrast, elderly Bulgarians today enjoy almost universal coverage, a legacy from socialism when full employment was the norm. The role of pensions in providing old-age income security is shrinking, which means that a large segment of uncovered elderly may ultimately be at higher risk of poverty. This could translate into higher social assistance expenditures as elderly people turn to alternative social programs for relief. Even with assumed large social assistance spending, average incomes of the elderly, especially women, are expected to fall.

155. Future pension benefits are likely to be low, especially for those with low incomes and sporadic careers. Even with a full career, the pension of a minimum-wage worker is expected to fall below the minimum guarantee within the PAYG pillar. Since the minimum is only slightly higher than the partial pension provided after a minimum of 15 years of contributions, lower wage earners may have little motivation to contribute past the 15 years. It is projected that in 2075 only 51 percent of female and 49 percent of male pensioners will be eligible for a full pension from the PAYG system. Roughly 19 percent of female and 18 percent of male pensioners are expected to draw the minimum contributory pension with 15 years of
service, and another 30 percent will have no right to a contributory pension. Moreover, the pension for an average wage-earner with full length of service will not be much higher than the minimum guarantee. By 2060, the average replacement rate from the PAYG scheme will only be 10 percent higher than the partial old-age pension provided with 15 years of service.

156. **Low coverage and the practice of subsidizing the pension system from general revenue reduce its equity.** Declining pension coverage plus sizable subsidies from general revenue, which are increasingly directed to higher-income groups, tend to redistribute wealth from the unsubsidized poor to subsidized wealthier population. Transfers of about 5.8 percent of GDP already crowd out productivity-enhancing investments in such areas as education, innovation, and infrastructure. It is also likely that the projected contraction in the working-age population will result in a further decline in state revenues as fewer workers join the labor market and pay income taxes. It is reasonable to expect that fewer resources will be available to cover the PAYG deficit as general tax revenues shrink, jeopardizing the back-up financing vehicle for the pension system.

157. **The high replacement rate is not sustainable.** Despite a markedly lower contribution rate and worse demographics, Bulgaria’s pension system promises an average wage income replacement rate of about 47 percent, in line with regional averages (Figure 3.11). Recent reforms to the benefit formula are expected to control generosity by closely linking contributions paid to benefits received. The formula applies to the lifetime average wage an annual accrual rate of 1.1 percent (going up to 1.2 percent in 2017). With a full career, the formula offers an average income replacement rate of 41 percent for women and 44 percent for men. However, with a replacement rate of 44 percent and a system-dependency rate of 75 percent, the PAYG system would require a pension contribution rate of 33 percent if it is to be fiscally self-sustainable. The current rate is 17.8 percent.

![Figure 3.11. Contribution Rate and Gross Income Replacement Rate](Source: OECD and Social Security Programs Throughout the World: Europe, 2012.)

158. **Inconsistency in pension reform has jeopardized the long-term fiscal sustainability of the pension system.** In 2011 Bulgaria initiated major reforms designed to improve the fiscal balance of the PAYG system; however, implementation of those reforms has been suspended. The reforms in 2011 envisaged: (1) a gradual increase in the retirement age for men to 65 by 2017 and to 63 for women by 2020; and (2) a switch away from the Swiss rule for indexation of pensions (50 percent inflation and 50 percent real growth of insurance income). In 2013, however, these reforms were suspended; raising the retirement age is planned to resume in January 1, 2016, but the age will go up by only two months a year rather than the four originally planned. In addition to much-needed reforms being suspended, pension spending went up in
mid-2014 to provide for Christmas and Easter bonuses; a reversal of private pension accumulation policies that were first implemented in 2002 are being discussed. Recent reforms have consisted of measures that increase pension spending without commensurate measures to improve pension revenues. Frequent changes to pension legislation make long-term fiscal planning difficult and delay the restoration of fiscal self-sustainability and credibility to the pension system.

159. **There are opportunities to make the pension system more inclusive**:  

- *Raise the retirement age beyond age 65 and equalize it for men and women.* Higher statutory and effective retirement ages would contribute to both fiscal sustainability and higher future pension incomes. Equalizing the retirement age for women and men will mean higher benefits for women because women, who have higher life expectancy than men, will contribute longer to the pension system.

- *Raise contribution rates.* A small increase in contribution rates could help adjust the pension system to the coming adverse demographic changes.

- *Introduce a universal pension financed from general revenue.* A universal benefit for all citizens aged 65 or more, financed by general revenue, added to a smaller earnings-related pension financed by private contributions would ensure the equity of the pension system as coverage among the elderly declines. If those individuals who have worked in the formal sector and made contributions could continue to earn an earnings-related pension, the consumption-smoothing element of the system could be preserved. This arrangement could alleviate poverty among the vulnerable elderly while still providing a means for wealthier individuals with formal sector employment and contribution history to accumulate larger pensions.

---

45 In May 2015, the Government approved amendments to the pension legislation that envisage: gradual increase in the retirement age so that by 2037 the retirement age is 65 for men and women, and an increase of pension contribution by 1 percentage point per year in 2017 and 2018. These amendments await Parliamentary approval.
4. **Sustainable Growth and Shared Prosperity**

160. In order to achieve convergence to EU living standards and preserve improvements in poverty reduction and shared prosperity, growth needs to be sustainable as well as faster and inclusive. For growth and improvements in shared prosperity to be sustainable, Bulgaria must manage volatility from macroeconomic, social, and environmental sources. In most countries, volatility has been found to be most damaging for small firms and poor households, especially countries like Bulgaria that still need to adopt effective safety nets to help households cope with income volatility. The SCD explores ways to mitigate the impact of external and internal shocks on:

- **Macroeconomic stability**: This may be caused by external and domestic sources e.g., weak recovery in the EU and elsewhere; and political instability, mismanagement in the energy sector, turbulence in the banking sector. Macroeconomic volatility creates business cycles with sudden upswings that probably benefit the top 60 percent and painful downturns more likely to affect the bottom 40 percent of the population.

- **Social stability**: Bulgaria needs to address its current vicious circle of political instability by renewing the social contract between state, citizens and other stakeholders, promoting participation and transparency and embarking on resolute action to promote more and better jobs, and to deliver better public services. In less than two years Bulgaria has had five governments. The frequent changes meant high government turnover and a lack of consensus for reforms, just when reforms are most needed to mitigate the short-term effects of the global financial crisis and address long-term demographic challenges.

- **Environmental sustainability**: Risks arise from volatility to natural disaster: floods, droughts, and earthquakes that can lead to significant losses and damages both for the government budget and for households. High investment needs in the water and sanitation sector, as well as irrigation, are likely to increase demand for government resources and raise household spending on water. High energy intensity of the economy is far from sustainable and needs to be addressed.

**Safeguarding Macroeconomic and Financial Stability**

161. The currency board has helped Bulgaria safeguard macroeconomic and financial stability since 1997. Bulgaria introduced a currency board in July 1997 to anchor exchange rate expectations and reduce inflation. The currency board has been a key factor for guaranteeing macro-fiscal stability. It implies, however, that fiscal policy is the Government’s key macro-management tool. A prudent fiscal policy and sufficient fiscal buffers are critical for preserving fiscal stability and maintaining growth. In the context of Bulgaria’s current weak demand, the government’s limited space for boosting demand consists of improving the efficiency of public spending. In the context of a currency board, a strong banking system is particularly important since the central bank can serve as a lender of last resort for banks in trouble only to a limited extent and only under certain conditions. The fiscal implications of a banking sector crisis can be significant, as became apparent in 2014.

162. Fiscal and financial sector policies have underpinned macroeconomic stability. Bulgaria weathered the global financial crisis relatively well. The currency board, introduced
in 1997, has been a key factor for guaranteeing macro-fiscal stability. The fiscal balance worsened abruptly from a surplus of 1.6 percent of GDP in 2008 to a deficit of 4.2 percent in 2009, and Bulgaria became subject to the EU Excessive Deficit Procedure (EDP) \(^{46}\) when the deficit exceeded the EU Growth and Stability Pact threshold of 3 percent of GDP. Excessive deficit was corrected quickly and in 2011-13 deficits have been at or below 2 percent of GDP, among the lowest in the EU. Public debt was the second lowest in the EU at a level of 18.3 percent of GDP in 2013;—low overall yields and low primary deficits led to stable debt dynamics despite low growth. The country’s current account deficit moved from 24 percent of GDP in 2007 to smaller deficits and even a surplus of 1 percent in 2013 as a result of fewer imports, higher transfers due to faster absorption of EU funds, and a solid recovery in exports of goods. As net international investment position improved, there was less need for external financing. External liabilities, while large at about 100 percent of GDP, were mostly composed of long-term euro-denominated intra-company loans. In the banking sector nonperforming loans were high (close to 10 percent of total loans), but were declining; provisioning, capital adequacy, and profitability were comfortable.

**Figure 4.1. Fiscal Deficit, 2000–17, Percent of GDP**

**Figure 4.2. Consolidated Government Debt, 2000–17, Percent of GDP**


163. **Bulgaria has been prudent in managing macro aggregates, but has done little to make public spending more effective.** Ineffective public spending compromises prospects for growth and shared prosperity over the medium to long term. Since 2008 productivity-enhancing public spending has either grown marginally (e.g., on education) or even declined (e.g., on R&D). Public investment, which is positively correlated with growth, also declined between 2008 and 2013 despite sizable EU grants that can be used to strengthen competitiveness and economic cohesion. Social assistance spending is not protecting the bottom 40 percent of the population: spending has shifted to programs that benefit the richest 60 percent of the population. At the same time, stalled reforms increase health and pension demands on public resources.

164. **Persistent drag from unreformed sectors, worsened governance environment, and weak recovery in the EU encourage slow economic growth and macro-economic stability risks.** GDP grew by 1.7 percent in 2014, slower than regional comparators (except Croatia) while employment increased only in 2014, six years after the crisis. Lack of progress in addressing long-standing structural issues in some sectors (energy, business regulation, court

\(^{46}\) Art. 126 of the Treaty on the Functioning of the EU obliges Member States to avoid excessive deficits in national budgets.
effectiveness, education, health), political instability, ineffective management of EU funds, and weaknesses in governance of the financial sector have contributed to this slow growth and deterioration of the fiscal position. Support to the banking sector alone accounted for 2.9 percent of GDP (for liquidity support to one bank and for recapitalization of the Deposit Insurance Fund). Fiscal space has narrowed substantially (Figure 4.1). The cash deficit widened to almost 3.7 percent of GDP (2.8 percent on accrual basis), from a planned 1.8 percent. Public debt went up by 9.3 percentage points of GDP in a year, hitting 27.6 percent of GDP by yearend 2014 (Figure 4.2). Part of the new borrowing was used to support the banking sector. The liquidity of the third largest bank in Bulgaria dried up after a run on deposits in June 2014. Public funds were also needed to cover the shortfall of the DIF when the fourth largest bank became insolvent.

165. **Although banking sector stability was shaken by the June bank runs, confidence in the sector remains high.** In June 2014, deposits amounting to nearly 5 percent of GDP were withdrawn from three banks in one week: First Investment Bank (FIB), the third largest bank, the Corporate Commercial Bank (KTB), the fourth largest bank, and KTB’s recently acquired subsidiary, Credit Agricole (later renamed Victoria Bank). The bank runs started with media reports about liquidity problems confronting KTB and FIB. KTB and its subsidiary were put under special supervision after their liquidity ran out. Within six months KTB’s license was revoked after auditors found the bank had negative capital adequacy of 180 percent and nearly two-thirds of its portfolio was a loss because of deficiencies in corporate governance and bad banking practices (e.g., related party transactions, a large share of loans without collateral). The auditors found the financial state of the subsidiary, Victoria Bank, to be satisfactory; after its liquidity was pumped up and its management replaced, the bank resumed operations. The FIB got immediate liquidity support from the government and continued normal operations. The deposit runs were contained within the three banks, and deposits of firms and households continued to grow (by 8 percent year-on-year in September 2014), though not as fast as before. Most of the deposit guarantees paid by the DIF to former clients of the insolvent KTB remained within the banking system; only a small percentage was withdrawn in cash. Bank liquidity went up to 30 percent in September 2014 (excluding KTB and Victoria Bank); capital adequacy remained high; and nonperforming loans (excluding impairment costs) were 10.5 percent.

166. **KTB's failure was a symptom of pre-existing vulnerabilities in bank governance practices and in the regulatory/supervisory framework.** Discrepancies between reported prudential indicators for KTB and its actual situation as revealed by the auditors’ review shattered confidence in bank regulation and supervision. Confidence was also undermined when the deputy governor of the Bulgarian central bank, responsible for bank supervision, was being investigated for professional negligence.

167. **The bank runs revealed deficiencies in bank resolution and deposit guarantee laws and in banking supervision.** Legislation had been passed after the banking crisis in 1997 and later updated in line with EU directives. The real-time test of the bank runs exposed substantial differences with the EU directives. For example the Deposit Guarantee Schemes Directive, which requires much faster access to deposits when a bank is closed. In Bulgaria, paying out of due and verified claims to depositors of KTB started once the bank’s license was revoked.

47 KTB acquired Credit Agricole (0.1 percent of banking sector assets) early in June 2014, several weeks before the run on deposits.

48 The European Banking Authority has notified the BNB and the DIF that they are breaching EU Law on October 20, 2014.
which was six months after it was placed under special supervision; the EU Directive requires that depositors be compensated within 25 days. The new Government in place since November 2014 has already started tackling some of these issues. The deposit insurance law was amended to harmonize better with the EU Deposit Guarantee Schemes Directive while a bank recovery and resolution framework consistent with the relevant EU directive has been drafted and is currently going through Parliamentary approval. BNB has initiated a Basel Core Principal Assessment of its banking supervision and plans to implement an asset quality review for all banks to be followed by a Financial Sector Assessment Program (conducted jointly by IMF and World Bank).

168. **Risks to banking sector stability remain.** These risks include: (1) relatively high level of non-performing loans on a gross basis (16.8 percent at the end of 2014) reflecting prolonged economic stagnation; (2) relatively low coverage of NPLs by reserves (55 percent at end of Q3-2014); (3) possible governance issues in other domestic banks; and (4) possible external shocks that could impact parents of foreign banks operating in Bulgaria (worsening of Greek crisis, loss suffered by some Western European banks in Russia and Ukraine).

169. **Fiscal consolidation and strengthening banking regulation and supervision are priorities for the government in the short and medium term to restore confidence and attract needed private investment.** The 2015 budget law envisages reducing the deficit to 3 percent of GDP; the medium-term framework envisages further gradual adjustment to 2 percent of GDP by 2017. Most fiscal adjustment in 2015 is expected to come from cuts in spending on wages and salaries. Correcting the fiscal deficit in the medium term will require consolidation that relies on restructuring spending, especially that related to public enterprises, and increasing efficiency and effectiveness, rather than resorting to across-the-board cuts and delaying reforms in critical sectors. Without fundamental restructuring, fiscal policy will not be able to sustainably support growth and shared prosperity.

170. **If not addressed, the contingent liabilities and quasi-fiscal activities of SOEs could add considerably to the fiscal burden.** In the energy sector, the hidden costs in electricity and gas have been estimated at 2.1 to 2.8 percent of GDP. The actual amount depends on the gap between assumptions for electricity end-user tariffs and long-term cost recovery. The financial imbalances in the energy sector, where arrears have built up, are the result, among other problems, of below cost pricing for residential end-consumers and increasing cost of the power mix, including generous payments for service delivery for some technologies set by law, insufficient planning of renewable additions; continuous use of inefficient and expensive production means; and contractual obligations for the purchase of power produced by Independent Power Producers. Most energy sector losses are concentrated in NEK, an SOE. By the end of 2014 NEK had built-up short- and long-term liabilities amounting to BGN3.3 billion and the operational deficit in 2014 was close to BGN600 million. Despite a very significant loan from the parent company, Bulgarian Energy Holding, NEK is unlikely to meet its obligations. The railway sector has also been accumulating losses and arrears due to delays in closing lines, deferred track maintenance, obligations under EU agreements, poor service, and lack of governance reforms.

171. **In the medium- to longer-term, the pressures of demographic change will have to be addressed.** Pensions are a major concern because of the demographic trends; the already high level of current transfers required to meet pension obligations; and the possible need for additional measures to compensate for low and declining pension coverage. In 2013 pension
spending accounted for 9.7 percent of GDP, of which 4.4 percent was in the form of transfers from the state, these are likely to increase if nothing is done to make the pension system sustainable. Health and LTC spending are also likely to rise, further burdening the budget.

172. **The following are opportunities for reinforcing macroeconomic stability:**

- *Strengthen confidence in the banking sector and in the effectiveness of banking supervision:* Transposing relevant EU Directives into national legislation would provide a good anchor for reforms, such as bank recovery and resolution and deposit guarantee directives. These are simply minimum standards. It will also be necessary to enhance governance in all institutions responsible for financial stability, such as the Deposit Insurance Fund, bank and non-bank financial supervision, and bank corporate governance. Additionally, disclosure of financial information to the market needs to improve.

- *Strengthen the fiscal position in the medium term.* Bulgaria may well lose the advantage it has enjoyed in keeping deficits and public debt relatively low, but that can be avoided by restarting the stalled structural reform program. Unless the authorities summon the necessary political will to act, they are at risk of losing the confidence of Bulgarian and foreign investors. Maintaining a stable economy will be more difficult without that confidence.

- *Improve management of public spending.* Bulgaria needs to reduce its deficit by rebalancing expenditures to protect productivity-enhancing funding for education and R&D and to allow for more effective use of EU resources; this is particularly the case for the public investment program. It should avoid across-the-board cuts and directly confront containment of quasi-fiscal deficits.

- *Building up the financial performance of SOEs, especially in energy and railways.* This can be done by creating a system to monitor arrears and manage contingent liabilities (e.g., a system for recording them in the Ministry of Finance) and by establishing legal requirements for approval of and provisioning for sub-sovereign liabilities. That should be followed by forceful corporate governance reforms, such as enhancing the transparency of inter-enterprise flows. Ideally, Bulgarian Energy Holding would be broken up so that each company has fully independent accounts, management, and investment and borrowing plans. Privatization through initial public offerings might also be desirable as well as progressive removal of regulated prices.

**Social Stability**

173. **To achieve sustainable growth and shared prosperity, Bulgaria needs to reset the social contract between the state, citizens, and other stakeholders.** Lack of government transparency and accountability combined with the widespread perception of corruption has hollowed out Bulgaria’s social contract and is creating political and economic instability. Repeated controversies—appointments having to be cancelled because of integrity issues, the escape from justice of convicted leaders of organized crime, and a succession of revelations about political influence over the courts—have undermined public confidence. There have been very few cases where perpetrators of corruption or organized crime have been brought to justice. Bulgaria is tied with Greece, Italy, and Romania for the highest EU scores in
Transparency International’s Corruption Perception Index 2014. Since the 1990s Bulgaria has invested heavily in public administration reforms, capacity-building, and anti-corruption measures and has achieved some important reforms. Less than satisfactory results however have eroded public trust in the government and its institutions.

174. **Relations between the state, citizens, and civil society have been difficult, and mechanisms for public input into policy-making are largely ineffective.** Bulgaria has established several corporate bodies to represent various interests in the process of policy-making, such as the Tripartite Cooperation Council, which has representatives of government, trade unions, and employer associations. Though the council has become a useful forum for advice, consultations, and policy negotiations, governments have sometimes departed substantially from agreements reached through council negotiations (e.g., the 2011 pension reform package and recent changes to the pension system to allow transfers from private pillars to the public pillar). Other civil society actors, notably minority organizations, are represented in more than 70 advisory councils at different levels of government, but they have little practical influence on government decisions. These consultation mechanisms are ineffective in part because of the paternalistic tradition in Bulgaria; the absence of a clearly-defined policy toward non-state actors; lack of trust on all sides; the perception of widespread corruption; and the lack of transparency and accountability in government and public service providers.

175. **What citizens know about government policies and their participatory competence is highly uneven and the media are becoming less independent.** Only a small share of citizens, typically those active in grassroots and other nongovernmental activism, seem to have much grasp of policy developments in their spheres of interest. Bulgaria’s media struggle to provide in-depth and consistent coverage and analysis of major policy and societal processes. Concentration of media ownership and increased dependence on government money for advertising or information campaigns make the media increasingly vulnerable to influence. Bulgaria was ranked the worst EU country in the Reporters Without Borders 2014 World Press Freedom Index, coming in at 100th place globally, having plunged from 35th in 2006 and 87th in 2013. As a result, most Bulgarian media concentrate on short-term coverage, e.g., framing government decisions as personalized power politics rather than providing substantive analysis of the issues. There is typically little to no coverage of the preparations leading up to policy decisions. When media coverage begins, it usually provides basic information about the decision or the policy, with no comprehensive discussion of the economic and societal implications (Bertelsmann Stiftung 2014). Bulgaria’s energy tariff reforms are a case in point: although the media are the main source of information on these reforms, their statements were mostly limited to official announcements of impending tariff increases, which created an environment of mistrust and failed to improve public understanding, which is a necessary condition for acceptance of any reform agenda (World Bank 2014n).

176. **Although public trust in the government is low, public expectations of the government are high.** According to the 2010 Eurobarometer Poverty and Social Exclusion report, 97 percent of Bulgarians feel that poverty is a problem that needs urgent government attention (EC 2010), and 85 percent believe the government is primarily responsible for preventing poverty. It is noteworthy that of all EU member states, Bulgarians have the least trust in non-state actors tackling the issue of poverty: only 22 percent trust NGOs or charities to effectively combat poverty, compared to 41 percent in Romania. A relatively high proportion

---

of Bulgarians, 47 percent, believe that inadequate or inefficient policies are the main cause of poverty (EC 2010).

177. **Social capital is distributed unevenly in Bulgaria, and a growing share of the population feels alienated from the social contract.** Vulnerable groups, in particular young people, the elderly, the rural poor, and Roma and Turkish minorities are excluded from participating effectively in certain markets and benefiting from social investments. This in turn prevents them from contributing to growth and alienates them from the social contract. The result is growing social inequalities and societal fragmentation. After unemployment, Bulgarians identify social inequalities as the most important challenge (EC 2014d). On the EU Social Justice Index, Bulgaria scores the third lowest after Romania and Greece in 2013.

178. **The following offer opportunities to strengthen social stability and thus achieve sustainable growth:**

- **Increase transparency and accountability.** Trust in the government and its service providers will depend on whether the public perceives that they are doing their jobs, and doing them right. Priorities for increased transparency and accountability in Bulgaria should be to strengthen protection of consumer rights and grievance redress channels. It should also be to ensure transparency with good quality information about policy decisions and reforms so that citizens and organizations can contribute to, contest, and participate in policy decisions. In addition the rules that govern provision of social benefits and job opportunities need to be simplified to avoid the perception that such decisions are subjective. People targeted by the programs need more mechanisms to provide feedback to providers and hold them accountable.

- **Enhance citizen engagement.** Civic participation is an important way of building and increasing social capital, which is particularly important for those marginalized in Bulgarian society. Citizen engagement and social accountability refer to processes and mechanisms that: (1) amplify citizen voice and participation; (2) ensure that policies and programs are transparent and accountable to all; and (3) ensure that policies and programs respond to citizen needs and feedback. This process relies on three types of actors: (1) citizens, who directly interact with governmental authorities to obtain information, provide feedback on government services, monitor governmental performance, and participate in government decision-making; (2) governmental authorities, who provide citizens with information, solicit feedback, and engage citizens in participatory initiatives; and (2) intermediaries (e.g., civil society groups, universities, think tanks), who offer support and facilitate the relationship between citizens and the government.

- **Raise political attention to social inclusion.** Expanding social inclusion is almost always a political outcome of interaction between different power groups. More intense debate on social inclusion problems, based on evidence, would be a good place to initiate renewal of Bulgaria’s social contract. Media could help build public consensus and keep citizens informed and engaged. Efforts should be directed to protecting press rights, enhancing media accountability, building media capacity, and democratizing

---

50 The Social Justice Index is a cross-national survey measuring six dimensions of social justice: preventing poverty, inclusive education, labor market access, social cohesion, health, and intergenerational justice.
media access. This requires mechanisms to ensure that the media are held accountable to the public and that their ethical and professional standards are respected.

Environmental Sustainability

179. **Addressing environmental issues is critical to ensure that growth and shared prosperity are environmentally sustainable.** Adjusted net savings (ANS) gives a better indication of whether growth in GNI is sustainable than standard measures of national savings. The ANS is equal to change in wealth (broadly defined to cover both human and natural wealth). By 2011, environmental degradation had reduced Bulgarian ANS by one-fourth (about US$200 per capita at constant 2005 prices), which subtracts from growth (Figure 4.3). Environmental issues in Bulgaria are clearly pressing. They range from inadequate management of the environment and natural resources to lack of infrastructure and financing to meet demand for municipal services. Also of major concern are vulnerability to natural disasters, significant financial needs in the water sector, and high energy intensity.

**Figure 4.3. Change in Total Wealth per Capita, 2005 and 2011, Constant 2005 SUS**

<table>
<thead>
<tr>
<th>Year</th>
<th>Gross Savings</th>
<th>Net Savings</th>
<th>Net Savings Plus Education</th>
<th>Depletion-Adjusted Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>1,200</td>
<td>800</td>
<td>400</td>
<td>200</td>
</tr>
<tr>
<td>2011</td>
<td>1,000</td>
<td>600</td>
<td>200</td>
<td>100</td>
</tr>
</tbody>
</table>

*Source: WDI.*

180. **Bulgaria is vulnerable to natural disasters.** It is among 75 countries in the world that are at relatively high economic risk from multiple hazards. Its economic risk of two or more hazards (mainly floods and droughts) is estimated at 30 percent of GDP; 29.3 percent of its total area and 31.6 percent of its people are at risk (World Bank 2005). Bulgaria is also exposed to earthquakes that can be devastating. For example in 1928 the Plovdiv earthquake killed around 250 people and left homeless 264,000 people. Disasters not only cause loss of human life, they also cause millions of euros worth of damage every year and undermine economic stability and growth. The bottom 40 percent of the population, especially the poorest, are more exposed to such risks because they are likely to live in houses that are less protected and have no insurance and little or no savings to meet unexpected needs.

181. **The contingent liability from disasters is high.** A forthcoming World Bank study on the risk for floods and earthquakes in Europe and Central Asia shows that the economic exposure to losses by an adverse natural event is very high in Bulgaria. For example, a 100

---

51 Changes in broad wealth are equal to the standard national income accounting measure of gross national savings adjusted to reflect (1) depreciation of physical capital; (2) accumulation of human capital (proxied by spending on education); and (3) changes in natural wealth, CO₂, and particulate matter damage.

52 ECA Risk Profiles for floods and earthquakes 2015 (to be publish in February)
year return\textsuperscript{53} period flood (not an unusual flood for the region) can affect almost 4 percent of the country’s GDP (Figure 4.4) and the total (public and private) damage and losses could be equivalent to more than 13 percent of the overall investment in a year. Exposure to earthquakes is also significant, a severe earthquake (250 year return period) can affect more than 50 percent of Bulgaria’s GDP with damages and losses corresponding to 33 percent of investment. Therefore, floods and earthquakes could result in significant costs for the government budget.

182. \textbf{Since 1999, natural disasters have become much more frequent in Bulgaria, raising the economic costs.} In mid-2014, 15 people lost their lives during floods near Varna and Dobrich; several hundred lost their homes or had to be evacuated; property, public infrastructure, agricultural land, and utilities were also affected. Total damage from the 2014 floods was estimated at €311.3 million.\textsuperscript{54} Bulgaria received €10 million from the European Solidarity Fund to help cover emergency costs. There is a growing awareness of the need for ex ante protection against disaster risks and a number of institutions and policies now deal with emergency response and preparedness. However, the government needs to take further progressive steps to address the growing challenges caused by climate change.

183. \textbf{Climate-related risks and related economic losses are expected to worsen in the next few decades.} The Department of Meteorology, National Institute of Meteorology and Hydrology, Bulgarian Academy of Sciences projects that air temperature in Bulgaria will rise annually by 0.7°C, reaching 1.8°C by 2020. By 2050 temperatures are expected to go up by 1.6°C to 3.1°C and by 2080 there will be additional annual warming of 2.9°C to 4.1°C. Precipitation is also projected to decrease by about 10 percent by 2020, 15 percent by 2050, and up to 30–40 percent by 2080. Agriculture, forestry, and water resource management will be among the sectors most deeply affected, although major impacts are not likely to materialize for some decades. The Bulgarian Academy of Sciences predicts a downward trend in long-term crop yields of 10 to 30 percent, depending on which global climate change scenario is assumed. Heavy rainstorms are expected to generate high runoff and more flash floods, which will exacerbate soil erosion, causing severe damage along steep streams and water-logging in low areas. The EU adopted a Climate Change adaptation strategy in 2013, and Bulgaria has taken steps toward preparation of its national strategy on adaptation to climate change. A recent assessment of the risk and vulnerability to climate change identifies the most vulnerable sectors of Bulgaria’s economy and the associated risks. Based on the analysis outcomes, a national adaptation strategy should be prepared with specific measures for responding to the growing risks from climate change impacts.

184. \textbf{Agriculture is extremely vulnerable to climate change.} There is evidence of more pressure on water resources, especially in southern parts of the country, and signs of gradual northward migration of certain plant and animal species. It is expected that some traditionally cultivated crops will become unviable and that pest and disease species hitherto unseen in Bulgaria will spread and be resilient to the new climatic conditions. Total annual rainfall will drop, rains will be more intense but not last as long, and the seasonal distribution of rainfall will change. Climate-related risks affect the livelihoods and incomes of not only farmers and their families but also consumers. Bulgarian agriculture is also exposed to market risks through European and global volatility in the prices for its main crops and livestock, and that volatility is itself affected by global climate changes. An integrated agricultural risk management

\textsuperscript{53} 100 year return period means that there is 1 percent probability of an event occurring in a year and it might happen more than one time in 100 years.

\textsuperscript{54} \url{http://europa.eu/rapid/press-release_IP-14-1128_en.htm}
strategy is needed to address both the production and the market risks confronting Bulgarian farmers.

185. **As major natural resources, Bulgarian forests can do a great deal to alleviate poverty, promote economic development, and mitigate climate change effects.** Forests cover about 34 percent of Bulgaria’s territory (about 4.1 million ha), of which about 80 percent is state-owned. Forestry is vital not only for the livelihood of the rural poor, who rely on it for firewood and construction timber, but also for industry, which takes about 70 percent of the current harvest. Bulgaria’s forests also have immense conservation value in terms of their biodiversity and the opportunities they offer rural residents for eco-system services. Their preservation and sustainable management could have significant implications in relation to climate change-related natural disasters, such as flood or drought.

186. **Streamlining environmental governance has not been easy.** Limited institutional capacity and insufficient public financing, human resources, and enforcement of Bulgarian environmental law have made it difficult for national, regional, and local administrations to align economic policies with sustainable development goals. Capacity, especially in the institutions responsible for central strategic planning and local environmental monitoring and law enforcement, is still not sufficient, this can render ineffective preventive and enforcement measures to protect the environment and contain environmental health risks. The Ministry of Environment and Water manages the drafting and implementation of environmental protection policy and local authorities are responsible for planning, preparing, and implementing environmental projects and fostering public participation and ownership. However, institutional structures and management processes do not always encourage close integration of strategic planning and resource allocation decisions. There are also deficiencies in the institutional arrangements and coordination mechanisms between agencies responsible for environmental planning, coordination, and regulation that promote lax enforcement of environment regulations. This is particularly evident when projects seeking funding from the EU and other sources are being prepared.

187. **EU funds can make it possible to intensify investments in water, waste, and nature protection infrastructure but previous EU projects have not been well-managed.** Poor administrative capacity, central in terms of strategic planning and management of EU fund allocations, and local in terms of capacity to prepare, finance, and implement projects, has led the temporarily blocked funding by the EC under Operational Program (OP) Environment. The temporarily blocked funding led to a considerable delay in investments needed to reach the EU compliance objectives and the environmental sustainability objectives. The problems are especially serious in agriculture, has and have undermined the effectiveness of investment in support of growth in rural regions.

188. **There is significant scope to better serve EU fund beneficiaries and heighten absorption of EU funds.** The EU allocated nearly €1.5 billion to Bulgaria for OP Environment for the 2007–13 financing period, As of November 2014, only 37 percent had been disbursed, with only a year remaining to close OP projects. Bulgaria has not been able to absorb all the EU funds as a result of: (1) a lack of transparency and information on application processing delays that led to tensions between beneficiaries and implementing agencies; (2) lengthy procedures to process applications, with multiple checkpoints; (3) poor communication with stakeholders on delays; (4) beneficiaries that because they are small, old, or less well-educated
have little access to resources; and (5) little information on support opportunities, such as advisory services or future standards.

189. Significant investments are needed to ensure that water quality and sustainable use of resources in water supply and sanitation comply with EU directives. Bulgarians have almost universal access to improved water in both urban and rural areas, but water networks need to be upgraded and wastewater collection and treatment systems extended. In many parts of the country water networks are at serious risk of acute failure—pipes are on average 36 years old, many are constructed of asbestos-cement, and close to 60 percent of the water is non-revenue water. 75 percent of the population is connected to a wastewater collection network, and just 56 percent to a wastewater treatment plant (based on NSI data). According to the new 10-year strategy for the sector (Republic of Bulgaria 2014), rehabilitation and construction of water supply and sewerage networks will require BGN 12 billion (€6 billion), much more than current low levels. However, EU funds will cover only 30–40 percent of the total capital investments needed until 2020. The rest will have to come from central government and the water utilities. That would require water utilities to substantially improve their efficiency as well as to adjust their pricing.

190. Irrigation and drainage systems also require restructuring and investments in order to ensure efficient water use for agriculture and to make it more productive. Little EU funding is available. Since 2000 the irrigated area served by the state-owned Irrigation Systems Company ISC has been reduced by about 50,000 ha, and irrigation, drainage, and hydraulic infrastructure has been deteriorating for 20 years, in many places it has entirely disappeared. Where systems still function, a large amount of water is lost from canals and pipes without generating significant agricultural benefits. Future investments in rehabilitation need to ensure smart design at all hydraulic levels, from the mains to the farm. Up-to-date irrigation infrastructure to support a sustainable rural development strategy will provide more opportunities for growth and employment.

191. Despite a substantial decrease in energy intensity in the past decade, energy efficiency in Bulgaria remains the lowest in the EU. The problem limits the sustainability of growth and affects aggregate growth because it raises production costs. High energy consumption is driven by: (1) inefficient conversion of energy to generate electricity and heat due to both obsolete technologies and high losses in transmission; (2) extensive use of electricity for residential heating because electricity prices are low and alternatives, such as direct gas heating or high-quality district heating, are few; and (3) low energy prices for end users, which discourages conservation. Bulgaria has set itself an energy efficiency target of reducing total domestic energy consumption by 50 percent by 2020, significantly higher than the EU target of 20 percent. The question is whether the government can put its current policies into place effectively and achieve coherence among the instruments needed to capture the full potential for energy savings.

192. More in-depth and up-to-date analysis is needed to fully understand the magnitude of Bulgaria's environmental sustainability challenges, how the bottom 40 percent of the population will be affected, and opportunities for addressing the challenges. Preliminary findings suggest that the environmental sustainability of growth will rely on government ability to:

- Invest in and conduct mitigation and adaptation measures in order to optimize use of natural resources and minimize damage to the environment.
• **Beef up environmental governance.** Better governance means better policy formulation and coordination, budgeting, and the capacity of both central and local environmental agencies to enforce the laws and implement EU-funded projects.

• **Ensure that financing for the water sector is affordable and sustainable.** This can be done by designing and putting in place a balance of measures to secure affordable water tariffs, cost-effective compliance with EU directives, increased efficiency of water utilities, and by addressing regulatory and governance issues. To achieve tariff affordability, it is necessary to discuss the social assistance mechanisms, tools, and funding opportunities of stakeholder institutions to identify how best to support vulnerable households.

• **Increase energy efficiency in industrial and residential buildings.** For the industrial sector, programs will be needed to help end users change their investment/purchasing decisions and behavior by providing financial incentives to firms to reduce energy costs and by offering technical assistance and other supportive measures (e.g., industrial benchmarking, energy audits and action plans, voluntary agreements, energy management systems). For the residential sector, it will be important to develop sustainable and affordable financing programs.
5. Transformational Policy Areas

193. **Consensus is needed on a long-term vision for Bulgaria’s economic and social development and on strategies to achieve it.** Action is needed on many fronts to narrow the gap with the EU in terms of living standards and quality of institutions. Based on qualitative analysis, benchmarking Bulgaria with regional comparators from the EU, and consultations with country team experts, three to four policy directions/opportunities have been identified for each of the policy areas within the three dimensions of growth (faster, more inclusive, and more sustainable growth) and on the basis of qualitative rather than quantitative assessment of their impact on the twin goals (Chapters 2, 3 and 4). These policy directions/opportunities were then narrowed down to three transformational policy areas (Table 1) based on the following criteria: (1) the likely magnitude of the policy impact on the Bank’s twin goals; (2) the potential for providing at least a minimum standard of living for all; and (3) the potential for cross-cutting or complementary effects among several dimensions of growth (faster, more inclusive, and more sustainable).

194. **Three transformational areas have been identified to be sine qua non for faster, more inclusive, and more sustainable growth.** Extensive analytical work of World Bank and non-World Bank experts suggests that sustained progress in three transformational areas is required for Bulgaria to achieve faster, more inclusive and sustainable growth. All three areas have substantial impact on the entire population, including on the bottom 40 percent of the population and would ensure basic minimum living standards for all. They deal with actions and policies that require a sustained reformed commitment. These three areas include:

- **Strengthening the institutional and legal framework for good governance.** Institutional weaknesses, in particular, the lack of formulating and implementing medium-term policies, have undermined Bulgaria’s economic progress and improvements in shared prosperity, by depressing productivity growth, reducing the efficiency of public services and threatening macro-economic stability. Sustained and comprehensive reforms in these three areas are likely to have a transformational impact on the Bulgarian economy: (1) modernizing public administration and management of public investment to enhance the effectiveness, transparency, and accountability of the conduct of public policy and accelerate absorption of EU funds; (2) improving the functioning of the court system; and (3) strengthening governance of SOEs in energy and railways and state regulatory bodies (energy, bank and non-bank supervision).

- **Boosting the skills and employability of all Bulgarians.** Fewer workers and a rising dependency ratio mean that workers of all ages and ethnic groups must have the right cognitive, socio-emotional, and technical skills to generate higher incomes. Workers who have the right skills will be more productive and employable and are more likely to innovate. More efficient labor market activation policies will make it easier for the poorer segments of the population to find jobs and thus broaden the inclusiveness of growth. Since Bulgaria has one of the most inequitable education systems in the EU, reforms are necessary to expand opportunities for the bottom 40 percent of the population. Boosting skills will entail policies to (1) expand early childhood development programs to improve schooling outcomes, which is especially critical for the poor; (2) improve quality of and access to primary and secondary education; (3) strengthen the governance of higher education to enhance quality and relevance; and
(4) expand adult education and continuing training, particularly for groups with the greatest needs: the low-skilled, marginalized groups, and those with the least formal education and the greatest literacy and numeracy problems.

- **Making public spending more effective and efficient.** Improving public spending will be important for boosting Bulgaria’s growth and improving social outcomes. In the context of an aging population, spending on pensions and health is critical to ensure more inclusive and sustainable growth. Pensions already provide incomes for a large share of the bottom 40 percent of the population and the number of pensioners is likely to increase rapidly in the coming years as Bulgaria’s baby-boomers retire. The quality of and access to health and long-term care is critical to ensure broader participation of the bottom 40 percent in the labor market, either because health problems prevent them from working productively or they have to take care of family members. With current demographic projections, pension, health, and long-term care costs are expected to rise significantly in the absence of reforms. Structural reforms will be needed to ensure that costs are sustainable and access to services remain equitable. Unless contained, these costs would reduce the fiscal space for productivity enhancing spending. Proposed reforms to make the pension system, and health and long-term care more inclusive, sustainable, and supportive of growth include: (1) improving the fiscal sustainability and equity of the pension system by introducing bold parametric reforms related to the retirement age and introduction of a universal pension financed from general revenues; (2) optimizing the hospital system and medication policy to stop the drain it is having on resources and ensure better access to and higher-quality care; (3) building up alternatives to hospital care and aligning incentives to ensure patients are treated at the right level of care so that the burden of chronic diseases is better and more efficiently managed.

195. **Some reforms, such as strengthening the stability of the banking system and strengthening the energy regulator, are urgent.** They are necessary to rebuild confidence and reinvigorate growth in the short term. The Government has started tackling some of them. The deposit insurance law was amended to harmonize better with the EU Directive on Deposit Guarantee Schemes while a bank recovery and resolution framework is currently being developed to make it consistent with the relevant EU directive. First steps have also been taken to strengthen the energy and water regulator. These include: (1) increased number and enhanced modus operandi of commissioners to ensure more effective and better informed regulation; (2) the commissioners are now elected by Parliament (instead of the Council of Ministers) which increases the independence of the regulator; and (3) most of the meetings of the regulator are now open to the public which enhances the transparency of decision-making.

196. **Other reforms have a medium- to long-term horizon but their implementation will need to start without delay.** Making progress in improving transformational policy areas will require a sustained reform commitment and it may take years for the reform efforts to fully bear fruit. Many of these reforms have already been initiated with some of the measures included in the recently adopted Government Program (Republic of Bulgaria 2014a) or in the Updated Judiciary Strategy approved by Parliament. Moreover, as many proposed reforms are difficult, building a national consensus will be important.
Annex 1: List of References


Cuaresmo, Crespo; Loichinger, Elke; Vincelette, Gallina, 2014, “Aging Workforce in Europe: A Sector-Level Investigation”, mimeo


——. 2014c, Special Eurobarometer 413. Luxembourg: European Commission.


—. 2014a. BLISS - Bulgarian Longitudinal Inclusive Society Survey” (forthcoming). Bulgarian Longitudinal Inclusive Society Survey
—. 2014o, Activating and Increasing the Employability of Specific Vulnerable Groups in Bulgaria - a Diagnostic of Institutional Capacity. Mimeo, World Bank, Washington, DC.
Annex 2: Consultations with Government and Non-Government Agencies

Given Bulgaria’s political volatility in 2013-14 and recent snap elections the SCD team adopted a sensitive two-phase approach to ensure that the process was open and that stakeholders were consulted about the diagnostic. The consultation process was structured first to identify stakeholders and second to test with them the storyline and main messages. The first part of the process was guided by a simple mapping of potential stakeholder power, influence, and interest. Thus, three target audiences were identified:

1. **Newly elected members of Parliament and government**, as the main client and authorizing authority
2. **Local governments and international partners such as EC representatives and ambassadors**, as opinion makers in the country
3. **Representatives of national civil society and think tanks**, as independent and objective voices.

The team began the consultations with a series of face-to-face meetings and discussions. During September through December 2014, as national elections took place and the new parliament and government were formed, the World Bank Country Manager for Bulgaria met with some 300 stakeholders: representatives of civil society and think tanks, mayors, ambassadors, new MPs, ministers, and deputy prime ministers. The purpose of the meetings was to solicit their opinions on factors that prevent Bulgaria from achieving faster, more inclusive, and more sustainable growth. These initial face-to-face discussions confirmed that the SCD team was looking into topics generally considered relevant and reassured the team that their evidence-based approach to the analysis was appreciated.

The second phase of the consultation process began in January 2015 with a series of meetings with the three target audiences. Because these meetings sought more structured feedback, all participants were asked the following questions:

1. Does the diagnostic make sense?
2. Are the proposed game-changers feasible?
3. What is missing?

**All stakeholders agreed with the main theme**, that if the country is to converge with EU living standards in one generation, Bulgaria must become significantly more productive; strengthen governance generally and judicial and public administration in particular; invest in infrastructure and education of the labor force; and reform health and pension spending (see Table A3.1).

**All feedback received was highly positive and complimentary.** No gaps were identified in the story line, priority policy areas, or suggested policy options. Although national media were not a targeted audience, SCD meetings with the Government and Parliament triggered media interest. As a result, the prospect of the forthcoming SCD report was reported in 50 national print media and web agencies.
Table A2.1. Comments on the SCD from the Target Audiences.

<table>
<thead>
<tr>
<th>Audience</th>
<th>SCD Relevance</th>
<th>SCD Priority Policy Areas</th>
<th>Gaps</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Parliament</td>
<td>The diagnostic is highly relevant to Parliament’s main priority—to restore trust and confidence in the society, in order to supporting investments and improve such vital sectors and services as energy and education—while adhering to fiscal discipline.</td>
<td>The proposed policy actions are correctly identified; specific priorities are subject to the program of the new government.</td>
<td>No gaps were found in the story line.</td>
</tr>
<tr>
<td>Government</td>
<td>The findings fully resonate with both the Program Declaration of the coalition government and the new Government Program for Sustainable Development of Bulgaria through 2018.</td>
<td>The proposed game chargers comply with actions identified as priorities in the Government Program for Sustainable Development of Bulgaria until 2018</td>
<td>N/A</td>
</tr>
<tr>
<td>EU Ambassadors</td>
<td>The diagnostic presents a fair and objective picture of Bulgaria.</td>
<td>Judicial reform is rightly identified as central to strengthening governance and aligning with EU standards.</td>
<td>There was concern that current political stability is fragile and may only last 1.5 years until the next presidential elections.</td>
</tr>
<tr>
<td>CSOs, think tanks, and trade unions</td>
<td>The findings are highly relevant and well structured.</td>
<td>The proposed priority policy areas are the correct ones, but prioritization will matter because the CSOs have different criteria for prioritization; their top 10 priorities are: rule of law, judiciary, employment, investment climate, education, labor market investments, social expenditure efficiency, healthcare and pensions. CSO representatives pointed out that to achieve progress, a broad consensus and strong leadership are needed.</td>
<td>N/A</td>
</tr>
</tbody>
</table>
## Annex 3: Bulgaria Selected Economic Indicators

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Income and Economic Growth</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP Growth (% change, y-o-y)</td>
<td>5.8</td>
<td>-5.0</td>
<td>0.7</td>
<td>2.0</td>
<td>0.5</td>
<td>1.1</td>
<td>1.7</td>
</tr>
<tr>
<td>GDP Per Capita Growth (% change, y-o-y)</td>
<td>6.5</td>
<td>-4.4</td>
<td>1.3</td>
<td>2.6</td>
<td>1.1</td>
<td>1.6</td>
<td>2.3</td>
</tr>
<tr>
<td>GDP Per Capita (US$)</td>
<td>7,116</td>
<td>6,738</td>
<td>6,581</td>
<td>7,589</td>
<td>7,199</td>
<td>7,499</td>
<td>7,713</td>
</tr>
<tr>
<td>GDP Per Capita, PPP (current international $)</td>
<td>14,566</td>
<td>14,410</td>
<td>14,690</td>
<td>15,278</td>
<td>15,672</td>
<td>15,732</td>
<td>...</td>
</tr>
<tr>
<td>Private Consumption Growth (% change, y-o-y)</td>
<td>3.7</td>
<td>-6.4</td>
<td>0.5</td>
<td>1.8</td>
<td>3.9</td>
<td>-2.3</td>
<td>2.0</td>
</tr>
<tr>
<td>Gross Investment (% of GDP)</td>
<td>37.5</td>
<td>29.5</td>
<td>23.2</td>
<td>21.8</td>
<td>22.2</td>
<td>21.5</td>
<td>21.6</td>
</tr>
<tr>
<td>Public (% of GDP)</td>
<td>5.7</td>
<td>5.1</td>
<td>4.8</td>
<td>3.5</td>
<td>3.5</td>
<td>4.1</td>
<td>5.0</td>
</tr>
<tr>
<td>Private (% of GDP)</td>
<td>31.8</td>
<td>24.4</td>
<td>18.4</td>
<td>18.3</td>
<td>18.7</td>
<td>17.4</td>
<td>16.6</td>
</tr>
<tr>
<td><strong>Money and Prices</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inflation, Consumer Prices (% change, y-o-y, end of year)</td>
<td>7.2</td>
<td>1.6</td>
<td>4.4</td>
<td>2.0</td>
<td>2.8</td>
<td>-0.9</td>
<td>-2.0</td>
</tr>
<tr>
<td>Inflation, Consumer Prices (% change, y-o-y, average)</td>
<td>12</td>
<td>2.5</td>
<td>3.0</td>
<td>3.4</td>
<td>2.4</td>
<td>0.4</td>
<td>-1.6</td>
</tr>
<tr>
<td>Real Effective Exchange Rate Index (2000=100)</td>
<td>174</td>
<td>174</td>
<td>172</td>
<td>173</td>
<td>175</td>
<td>173</td>
<td>174</td>
</tr>
<tr>
<td>M2 (% GDP)</td>
<td>64.1</td>
<td>67.5</td>
<td>70.5</td>
<td>72.4</td>
<td>77.0</td>
<td>83.7</td>
<td>82.7</td>
</tr>
<tr>
<td><strong>Fiscal (% of GDP, ESA2010)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenues</td>
<td>39.3</td>
<td>36.4</td>
<td>34.1</td>
<td>32.6</td>
<td>34.5</td>
<td>37.4</td>
<td>36.4</td>
</tr>
<tr>
<td>Expenditures</td>
<td>37.7</td>
<td>40.6</td>
<td>37.4</td>
<td>34.7</td>
<td>35.2</td>
<td>38.3</td>
<td>39.2</td>
</tr>
<tr>
<td>Current</td>
<td>32.0</td>
<td>35.5</td>
<td>32.6</td>
<td>31.2</td>
<td>31.7</td>
<td>34.2</td>
<td>34.2</td>
</tr>
<tr>
<td>Capital</td>
<td>5.7</td>
<td>5.1</td>
<td>4.8</td>
<td>3.5</td>
<td>3.5</td>
<td>4.1</td>
<td>5.0</td>
</tr>
<tr>
<td>Overall Fiscal Balance</td>
<td>1.6</td>
<td>-4.2</td>
<td>-3.2</td>
<td>-2.0</td>
<td>-0.7</td>
<td>-0.9</td>
<td>-2.8</td>
</tr>
<tr>
<td>Primary Fiscal Balance</td>
<td>2.5</td>
<td>-3.4</td>
<td>-2.5</td>
<td>-1.3</td>
<td>0.1</td>
<td>-0.1</td>
<td>-2.1</td>
</tr>
<tr>
<td>Government consolidated gross debt</td>
<td>13.3</td>
<td>14.2</td>
<td>15.9</td>
<td>15.7</td>
<td>18.0</td>
<td>18.3</td>
<td>27.6</td>
</tr>
<tr>
<td>External Public Debt</td>
<td>10.8</td>
<td>11.7</td>
<td>11.8</td>
<td>10.5</td>
<td>11.2</td>
<td>9.9</td>
<td>15.6</td>
</tr>
<tr>
<td><strong>External Accounts (current EUR millions, unless otherwise indicated)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Export Growth (% real change, y-o-y)</td>
<td>3.5</td>
<td>-12.1</td>
<td>35.1</td>
<td>15.9</td>
<td>-3.4</td>
<td>12.1</td>
<td>2.2</td>
</tr>
<tr>
<td>Import Growth (% real change, y-o-y)</td>
<td>4.3</td>
<td>-23.2</td>
<td>12.5</td>
<td>10.7</td>
<td>2.8</td>
<td>5.0</td>
<td>3.8</td>
</tr>
<tr>
<td>Merchandise Exports</td>
<td>15,204</td>
<td>11,699</td>
<td>15,561</td>
<td>20,264</td>
<td>20,770</td>
<td>22,271</td>
<td>22,116</td>
</tr>
<tr>
<td>Merchandise Imports</td>
<td>23,802</td>
<td>15,873</td>
<td>18,325</td>
<td>22,420</td>
<td>24,230</td>
<td>24,701</td>
<td>25,061</td>
</tr>
<tr>
<td>Services, Net</td>
<td>1,310</td>
<td>1,300</td>
<td>1,868</td>
<td>2,316</td>
<td>2,269</td>
<td>2,263</td>
<td>2,558</td>
</tr>
<tr>
<td>Workers' Remittances, Net</td>
<td>1,187</td>
<td>1,070</td>
<td>990</td>
<td>1,043</td>
<td>1,107</td>
<td>1,225</td>
<td>1,249</td>
</tr>
<tr>
<td>Current Account Balance</td>
<td>-8,182</td>
<td>-3,116</td>
<td>-533</td>
<td>33 -458</td>
<td>411</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>as percent of GDP</td>
<td>-22.4</td>
<td>-8.6</td>
<td>-1.5</td>
<td>-1.0</td>
<td>-1.1</td>
<td>1.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Foreign Direct Investment</td>
<td>6,206</td>
<td>2,505</td>
<td>977</td>
<td>1,213</td>
<td>871</td>
<td>1,266</td>
<td>1,127</td>
</tr>
<tr>
<td>External Debt, Total</td>
<td>37,246</td>
<td>37,816</td>
<td>37,026</td>
<td>36,295</td>
<td>37,714</td>
<td>36,936</td>
<td>39,765</td>
</tr>
<tr>
<td>as percent of GDP</td>
<td>102.2</td>
<td>104.8</td>
<td>100.7</td>
<td>90.5</td>
<td>92.2</td>
<td>90.0</td>
<td>94.7</td>
</tr>
<tr>
<td>Debt Service Ratio (% of exports goods and non-factor services)</td>
<td>35.3</td>
<td>44.4</td>
<td>35.1</td>
<td>26.6</td>
<td>25.1</td>
<td>25.1</td>
<td>19.5</td>
</tr>
<tr>
<td><strong>Population, Employment and Poverty</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population, Total (millions)</td>
<td>7.6</td>
<td>7.6</td>
<td>7.5</td>
<td>7.3</td>
<td>7.3</td>
<td>7.3</td>
<td>7.2</td>
</tr>
<tr>
<td>Population Growth (% change, y-o-y)</td>
<td>-0.5</td>
<td>-0.5</td>
<td>-0.7</td>
<td>-2.5</td>
<td>-0.6</td>
<td>-0.5</td>
<td>-0.5</td>
</tr>
<tr>
<td>Unemployment Rate (% of labor force)</td>
<td>5.6</td>
<td>6.8</td>
<td>10.2</td>
<td>11.2</td>
<td>11.3</td>
<td>12.9</td>
<td>11.4</td>
</tr>
<tr>
<td>Poverty Headcount Ratio at US$1 a day (PPP) (% of population)</td>
<td>13.0</td>
<td>12.7</td>
<td>15.6</td>
<td>16.7</td>
<td>...</td>
<td>...</td>
<td></td>
</tr>
<tr>
<td>Inequality - Income Gini (%)</td>
<td>35.9</td>
<td>33.4</td>
<td>33.2</td>
<td>35.0</td>
<td>33.6</td>
<td>35.4</td>
<td></td>
</tr>
<tr>
<td>Life Expectancy</td>
<td>73.6</td>
<td>73.8</td>
<td>74.0</td>
<td>74.5</td>
<td>74.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP (current LCU, millions)</td>
<td>75,205</td>
<td>71,436</td>
<td>71,904</td>
<td>73,329</td>
<td>73,690</td>
<td>74,475</td>
<td>75,745</td>
</tr>
<tr>
<td>GDP (current US$, millions)</td>
<td>53,316</td>
<td>50,162</td>
<td>48,669</td>
<td>55,767</td>
<td>52,590</td>
<td>54,481</td>
<td>55,735</td>
</tr>
<tr>
<td>Doing Business Ranking</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>36</td>
<td>38</td>
</tr>
</tbody>
</table>

Sources: NSI, BNB, Eurostat, World Bank
Annex 4: Knowledge Gaps

**Poverty and shared prosperity.** Data on poverty and incomes of the bottom 40 percent of the population are available with some lag. The latest data used for the SCD is for the period 2007-11 which covers both the boom period (2007-08) and the period of economic decline and slow economic growth (2009-11). Longer time series will be needed to understand better trends in poverty and shared prosperity during the economic recovery.

**Informality.** Data and analysis on this issue are thin although informality is likely substantial judging by significant differences between household income and expenditure data. It almost certainly highly concentrated among the poor, particularly the Roma.

**Regional development.** More analysis is needed to understand better the constraints and opportunities for boosting growth and shared prosperity at regional level.

**Firm level information and data on state owned enterprises.** Firm level data exist but public information is scarce even on aggregate level. SOEs are obliged to publish their income statements and balance sheet but the information is not always up-to-date.

**Environmental sustainability.** Better information on environmental sustainability would give a clearer picture of growth potential, fiscal risks, and impacts on the bottom 40 percent of the population.

**Agriculture.** It is sometime claimed that land fragmentation is an impediment to higher productivity and employment. This may be true but a substantial portion of agricultural is in large consolidated farms mostly devoted to capital intensive grain production and involving relatively little labor. The small plots are often associated with single family residences. The potential for aggregation of the latter may be limited and is unlikely to result in greater employment. Separate analysis of the two distinct subsectors would be more revealing.