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# Romania

## Europe 2020 Romania: Evidence-based Policies for Productivity, Employment, and Skills Enhancement

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# Table of Contents

Currency Equivalents.....	i
Abbreviations .....	i
Acknowledgments.....	iv
Executive Summary .....	1
I. Introduction .....	8
II. The Macroeconomic Context .....	11
The pre-crisis period .....	11
Towards a new development model: .....	14
III. Facing the Employment Challenge.....	22
The employment problem in Romania.....	23
Determinants of employment prospects in Romania .....	28
Reforms that enable faster job creation.....	30
Policy options for Romania .....	37
Skills Wanted: A higher demand for skills .....	38
Work incentives and accessibility in Romania .....	44
Key elements of a policy agenda to achieve the EU2020 target.....	57
IV. Education and Skills Development – From Continuous Change to Continuous Improvement .....	58
Challenges: Does the Romanian education system deliver?.....	60
Constraints: financing and human resources .....	66
Moving on from the status quo – what are the policy levers? .....	70
A system of lifelong learning and continuous improvements.....	88
V. Towards evidence-based policy making .....	91
Ensuring all programs have clear Results Frameworks in place.....	92
Undertake rigorous impact evaluations – social policy experiments – to learn which programs are the most cost-effective .....	93
Take advantage of the Romania poverty map to improve targeting of pro-poor inclusion programs ....	94
Labor Market Program: Promoting Information Flows .....	96
Summary of Recommendations .....	97
Employment (Section III) .....	97
Education and Skills Development (Section IV) .....	97
Towards evidence-based policy making (Section V).....	98

Annex 1: Unemployment structure by occupations and distribution of youth unemployment .....	99
Annex 2: Minimum and maximum annual gross statutory salaries of full-time fully qualified teachers in public schools relative to GDP per capita (2011/12) .....	101
Annex 3: Change for the better is possible: the Louisiana journey from fair to good .....	103
References .....	105

## Tables

Table 1: Europe 2020 Strategy Targets – State of Play .....	1
Table 1: Europe 2020 Strategy Targets – State of Play .....	8
Table 2: Evolution of assessment results and of economic indicators in Romania (2000 – 2009) .....	62

## Figures

Figure A: Determinants of Employment Prospects in Romania: Two pillars.....	4
Figure 1: GDP per capita, EU-27 = 100% (at PPS).....	11
Figure 2: Growth break down for Romania, 2003-08.....	12
Figure 3: Share of high, medium and low tech exports (%), 2000-10 .....	13
Figure 4: Exports of goods and services (% of GDP, 2011).....	13
Figure 5: Domestic demand vs. GDP growth, 2003-08.....	14
Figure 6: Budget expenditure, revenues and deficit (% of GDP).....	14
Figure 7: Productivity dynamics relative to the US .....	15
Figure 8: Convergence scenarios for Romania’s GDP per capita (in US\$), 1990-2030 .....	15
Figure 9: Pillars of the agenda for growth and convergence .....	16
Figure 10: Product Market Regulation, EU countries.....	17
Figure 11: Efficiency of capital Spending in the EU-27, 2011 .....	17
Figure 12: Growth in Employment Productivity and Exports, 1995-2009 .....	18
Figure 13: Working Age Population Projections, 2010-2050 .....	19

Figure 14: Romania’s employment rate barely changed despite high economic growth Employment (left) and unemployment (right) rates, 2002-11 .....	23
Figure 15: Romania’s employment problem is strongly correlated with age and gender. Percent of the working age population by each age group and gender, 2009 .....	24
Figure 16: Romania’s inactivity rates of youth and older workers are high by international norms. Percent of the working age population by each age group, 2011.....	26
Figure 17: Romania could increase its labor force significantly if older workers reached their participation potential. Percent increase in the size of the labor force by age group .....	27
Figure 18: Determinants of Employment prospects in Romania: Two pillars.....	29
Figure 19: Romania created many jobs but destroyed even more as the economy restructured – what other early reformers went through two decades ago. % jobs in total employment change, 2000–09.....	31
Figure 20: Most job creation in Romania is done by a small segment of “gazelle” firms .....	33
Figure 21: Food industry led in size and was less vulnerable to the shock. Apparel, and Computer-related industries, which had created jobs, cut jobs drastically after the crisis .....	35
Figure 22: Romania’s pool of potential entrepreneurship is low. Percent of the working age population by each age group, 2010 .....	36
Figure 23: More Romanian employers assert that skills are a binding constraint to their business. Distribution of firms that consider skills as a major or very severe constraint (2008) .....	40
Figure 24: Skills of older cohorts are at risk of obsolescence in Romania as in other EU10.....	41
Figure 25: Tertiary education - high average returns in Romania compared to other ECA countries .....	43
Figure 26: The costs of taking a formal job could be high in Romania, especially for low-wage earners and part-time workers. (% of gross labor income), 2010 .....	46
Figure 27: Europe 2020 education indicators and their connection to education levels.....	60
Figure 28: Average PISA scores vs. average socio-economic conditions in Europe .....	63
Figure 29: Percentage of 15 year-olds who are functionally illiterate.....	64
Figure 30: Reading performance gap of Romanian speaking students .....	65
Figure 31: Education attainment of Roma in Romania .....	66
Figure 32: Aggregated funding by GDP per capita .....	68
Figure 33: Potential salary increases of teachers in Europe.....	70
Figure 34: Gross enrollment rate in pre-school education in Romania.....	74
Figure 35: Decreasing number of early school leavers need 10 years to translate into decreased ‘young persons with low educational attainment’ .....	77

Figure 36: Poland’s PISA performance following the 1999 education reform.....	78
Figure 37: High percentage of students in VET at the secondary education level .....	81
Figure 38: Funding levels for secondary education .....	82
Figure 39: Life-cycle employment patterns by type of training .....	83
Figure 40: Annual expenditure on public and private educational institutions compared to GDP per capita	85
Figure 41: STEM graduates (per 1000 of population, age 20 – 29).....	86
Figure 42: Participation in adult learning .....	88
Figure 43: STEP approach.....	89
Figure 44: Results Framework .....	92
Figure 45: 2003 Poverty Map of Bulgaria.....	95
Figure 46: MoLSAF-WB Pilot Map of Roma Inclusion Projects in Slovakia .....	96

## **Boxes**

Box 1: The profile of emigrants and the Romanian Diaspora. ....	44
Box 2: Achieving Europe 2020 goals and the link with Roma inclusion .....	51
Box 3: Evidence-based labor policies by the Danish Labor Market Authority .....	53
Box 4: Why Invest in Early Child Development (ECD) .....	72
Box 5: Rigorous Impact Evaluation Promoting Preschool Enrolment of Roma Children .....	73
Box 6: Start early - An Open Letter to the Citizens of the European Union, including Romanians .....	75
Box 7: New sets of teaching competences .....	78
Box 8: Thousands of Romanian teachers protest wage cuts.....	80
Box 9: Does adult education improve labor market outcomes? .....	87

# Currency Equivalents

(Exchange Rate Effective)

Currency Unit =

US \$ 1.00 =

## Abbreviations

AHELO	Assessment of Higher Education Learning Outcomes
ALMP	Active labor market program
AUT	Austria
BEL	Belgium
BGR	Bulgaria
CEM	Country Economic Memorandum
CYP	Cyprus
CZE	Czech Republic
DEU	Germany
DIME	Development Impact Evaluation Initiative
DNK	Denmark
EBRD	European Bank for Reconstruction and Development
ECA	Europe and Central Asia
ECD	Early childhood development
ECTS	European Credit Transfer and Accumulation System
EFTA	European Free Trade Association
ECF	European Qualifications Framework for Lifelong Learning
ESF	European Structural Fund
ESF OP	European Structural Fund Operational Program
ESP	Spain
EST	Estonia
EU	European Union
EU27	27 European Union States
EU8	Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, Slovenia
EU SILC	European Union Statistics on Income and Living Conditions
EQF	European Qualifications Framework
FB	Family benefits
FCS	Financial Crisis Survey
FDI	Foreign direct investment
FIN	Finland
FRA	France
GBR	Great Britain
GDP	Gross domestic product
GMI	Guaranteed Minimum Income program
GRC	Greece

HB	Heating benefit
HUN	Hungary
ICT	Information and communications technology
IES	Institute of Education Sciences
IRL	Republic of Ireland
ISCED	International Standard Classification of Education
ITA	Italy
LMA	Labor Market Authority
LMO	Labor Market Observatory
LTU	Lithuania
LVA	Latvia
LUX	Luxembourg
M&E	Monitoring and Evaluation
MoNE	Ministry of National Education
MLT	Malta
MSIYP	Minimum Social Insertion Income Program
MTRE	Marginal tax rate on earnings
NEET	Not in employment, education, or training
NLD	Netherlands
NMS	New Member States
NQF	National Qualifications Framework
NRP	National Reform Program
OECD	Organisation for Economic Co-operation and Development
OER	Open Educational Resources
OLS	Ordinary Least Squares
OJT	On the Job Training
PIRLS	Progress in International Reading Literacy Study
PISA	Programme for International Student Assessment
PMR	Product market regulation
POL	Poland
PPS	Purchasing Power Standards
PRT	Portugal
R&D	Research and development
RLO	Regional labor office
ROM	Romania
SABER	System assessment and benchmarking for education results
SED	Special Education Needs
SDF	Skills Development Fund
SME	Small and medium enterprise
SOE	State owned enterprise
SPUR	Skills Program for Upgrading and Resilience
STEM	Science, technology, engineering and mathematics
STEP	Skills Toward Employment and Productivity
SVK	Slovakia
SVN	Slovenia
SWE	Sweden
TIMSS	Trends in International Mathematics and Science Study
TFP	Total Factor Productivity

TVET	Technical and Vocational Education and Training
UEFISCDI	Executive Unit for Financing Higher Education, Research, Development and Innovation
UK	United Kingdom
UNDP	United Nations Development Program
US	United States
VAT	Value added tax
VET	Vocational education and training
WB	World Bank
WfD	Workforce Development
WWC	What Works Clearinghouse

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## Executive Summary

1. **Employment and skills are at the core of Europe 2020, the European Union’s competitiveness strategy, and are decisive for high productivity and sustained growth.** Romania has overcome significant challenges on its path to EU membership and in the early years thereafter. However, the Romanian economy has recently come under pressure as a result of the economic crisis and because important reforms in employment and education have not yet been completed.
2. **The Europe 2020 Romania report discusses the key challenges currently faced by Romania in the area of productive employment, and proposes a set of steps the Romanian government could consider in order to reach the Europe 2020 targets** (see Table 1). Building on past and ongoing World Bank work, the report uses household and firm-level data to identify bottlenecks holding back the creation of productive jobs and the supply of relevant and quality skills. In laying out a road map to overcome these barriers, it emphasizes evidence-based policy making: a) by elaborating on the use of impact evaluations for policy formulation and implementation in the Europe 2020 context, b) by giving concrete examples of policies which have worked elsewhere and c) by providing specific examples of possible Impact Evaluations for suggested policy options in Romania. Policy recommendations are presented at the end of the report.

**Table 1: Europe 2020 Strategy Targets – State of Play**

Overall Targets	Romania Targets	Romania, 2012 <sup>1</sup>
75% of the population aged 20–64 should be employed	70%	63.8%
3% of the EU’s GDP should be invested in R&D	2 %	0.48% (2011)
The share of early school leavers should be under 10%	11.3%	17.4%
At least 40% of 30–34-year-olds should have completed tertiary education	26.7%	21.8%
Reducing the number of people at risk of poverty or exclusion by 20 million in the EU	Reducing by 580.000 the number of people at risk of poverty and social exclusion, by 2020, as compared to the year 2008, meaning a reduction by approx. 15% of the number of people living in poverty <sup>2</sup>	-240.000 people (23.4% in 2008 compared to 22.2% in 2011)

Source: European Commission ([http://ec.europa.eu/europe2020/europe-2020-in-your-country/romania/index\\_en.htm](http://ec.europa.eu/europe2020/europe-2020-in-your-country/romania/index_en.htm))

<sup>1</sup> The table provides the latest data available on the EC website ([http://ec.europa.eu/europe2020/europe-2020-in-your-country/romania/index\\_en.htm](http://ec.europa.eu/europe2020/europe-2020-in-your-country/romania/index_en.htm)). In general, these are data for 2012; however, for the R&D and poverty targets these are 2011 data.

<sup>2</sup> For the monitoring of the national target, Romania has chosen the indicator ”at risk of poverty after social transfers”.

3. **Skills remain a major challenge. In particular, there is insufficient provision of the higher level generic and technical skills needed for a modern and competitive economy, including skills for technological innovation and absorption of new technologies.** While Romania performs comparatively well in terms of higher education participation rates, there are concerns about early school leavers and the quality of provision, in particular at the tertiary level but also at earlier stages. A recent PISA<sup>3</sup> study has shown that 40 percent of those 15 year olds who are still in education in Romania are functionally illiterate. Concerns have also been raised about the quality of higher education provision. While unemployment rates for tertiary education graduates are still significantly lower than for other attainment groups, employers increasingly raise concerns about workers ‘lacking the right skills.’ This refers to both technical and vocational skills as well as generic skills, i.e. transferable skills (e.g. the ability to organize one’s own work and learning process, cognitive skills, communication and organizational skills).
4. **Skills shortages are a major constraint to economic growth, together with labor participation.** Surveys of employers indicate fundamental skills shortages, as graduates routinely leave the school system without the minimum knowledge levels needed to find a job. This explains the persistently high unemployment rate for the young, which is over 20 percent, and the high probability of a graduate immediately becoming unemployed (which is 60 percent of the probability of finding a job). While a number of notable legal and institutional changes to the education system have taken place, problems of quality, efficiency and equity remain. In spite of a rapid increase in the number of university graduates, there are questions about their proficiency. Life-long learning is still rare in Romania, which is of particular concern, as skills tend to become obsolete increasingly rapidly due to technological change. Job creation in areas of high value added is difficult if the appropriate pool of skills does not exist to respond to the demands of the labor market.
5. **For Romania to achieve its Europe 2020 employment target it must increase employment rates, starting with the labor force participation of women, youth and older workers.** These groups exhibit the lowest labor market attachment. Above 90 percent of men aged 25-49 were employed prior to the international financial crisis, a rate comparable to other New Member States. Roughly 72 percent of women in that age range has jobs and nearly a quarter does not actively seek jobs and stay outside of the labor force. This is below the levels of female participation in the EU27 and in several other EU10 countries. Employment rates fall dramatically for older individuals: 60 percent of men are employed in the age range 55-60 and barely one third in the 60-64 age range while the respective rates for women are around 40 and 25 percent. These largely reflect low rates of labor force participation as unemployment among these groups is relatively low.
6. **Achieving the Europe 2020 employment target in Romania thus hinges especially on increasing the labor force participation of the population beyond the age of 55, especially of women.** Romania could expand its labor force by at least 25 percent if older workers fulfilled their participation potential. The report compares the potential to increase the labor force in four age groups in Romania and other EU10, taking the participation rate of prime-age adults (age 40 to 44) in each country as the benchmark. By this yardstick, Romania is among those countries, which stand to gain the most from increasing the participation of older workers. Given the gender gap in participation profiles, much of this improvement would come from drawing more women into the labor force. The fast aging of the Romanian population implies that keeping the

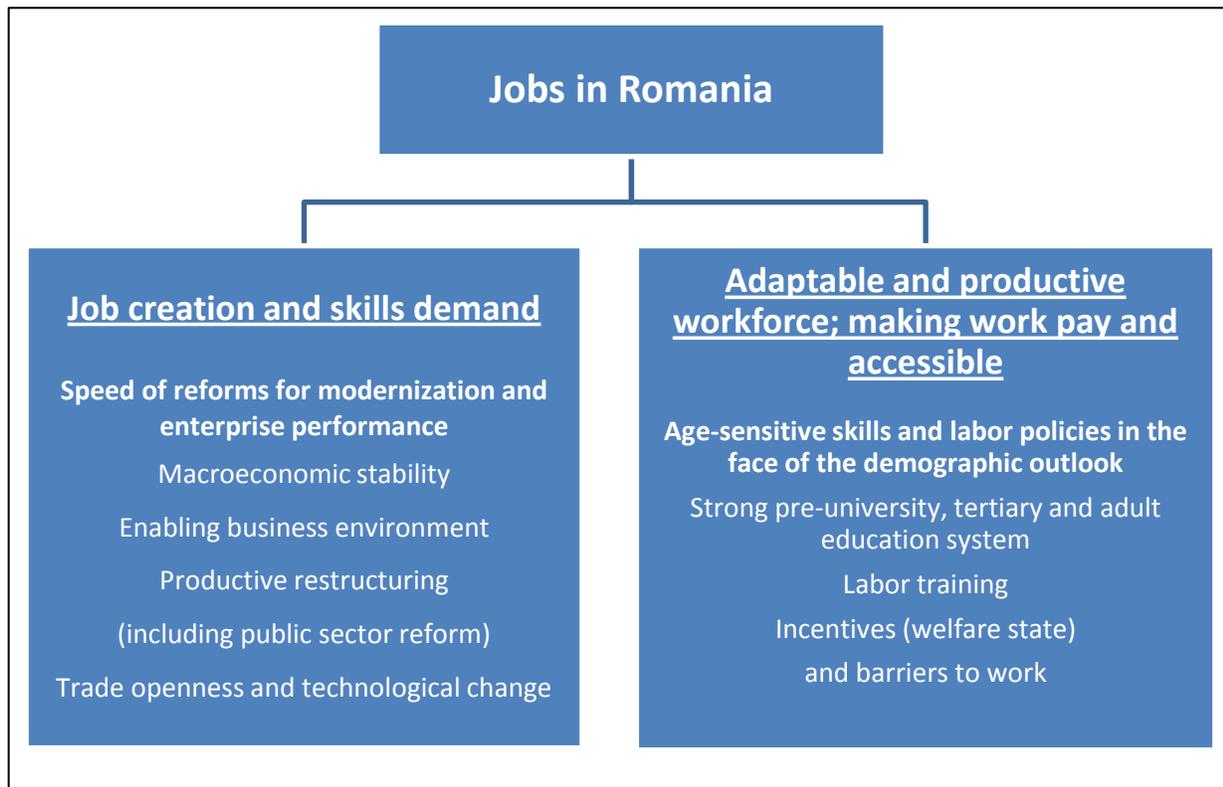
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<sup>3</sup> Programme for International Student Assessment.

sheer number of older workers in work for longer is also essential for reducing the impact of a shrinking labor force. For youth aged 15-24, there is a trade-off between getting them quickly into the work force and supporting them to develop the skill sets needed to support longer careers in an increasingly demanding and changing labor market. As shown in the education and skills development section, increasingly many of them are already continuing in tertiary education, but at the same time, many are dropping out too early from school with insufficient skills foundation.

7. **Employment prospects in Romania hinge on further reforms to promote economic modernization and the development of a more adaptable and productive workforce in the context of a fast aging population.** The discussion in the report is built on the premise that labor market performance in Romania depends on the continued pace of reforms to promote a market economy and the impacts of its demographic outlook. As argued in a forthcoming World Bank jobs report on Eastern Europe and Central Asia (World Bank 2013b), the relationship between economic growth and employment in EU10 countries since the transition has been largely mediated by the pace of reforms towards a modern market economy. There are important differences across EU10 countries in the pace of reform and economic restructuring. While several countries (such as Poland) embarked on a strong path of economic modernization in the early 1990s and had made significant progress by the early 2000s, Romania lagged behind initially and then caught up during the 2000s, especially after the process of EU accession provided strong momentum for faster and comprehensive reform. Still, as noted in the macroeconomic section, important reforms for continued economic restructuring are pending. Meanwhile, changes in the size and composition of the labor force will shape labor market performance as different age groups adapt differently to the productive restructuring arising from reforms and economic modernization. Twenty years from now, older workers (aged 55-64) will outnumber young workers (ages 15-24) by about 50 percent (reaching nearly 18% of the working-age population), and individuals above the age of 55 will be more than double the size of the pool of young workers. This imbalance will further increase if the recent sizeable emigration of young Romanians continues.
8. **This report argues that by combining policies in two key areas, Romania can achieve its Europe 2020 employment target and go beyond that. Figure A encapsulates the most relevant policy factors under the two pillars: i) in the short and medium term, policy reforms to enable a faster dynamic of job creation by the private sector; ii) in the short to longer term, policies to foster the adaptability and productivity of a shrinking and aging workforce.** The latter should address a shift in the demand for skills, an insufficient response from the education and training system, and incentives and barriers to work, all of which affect young and older workers, women and minorities in distinct ways.

**Figure A: Determinants of Employment Prospects in Romania: Two pillars**



9. **The report suggests a key role for public policy in strengthening the job creation pillar, thereby enabling Romania to achieve its Europe 2020 employment target. There is a common policy agenda of reforms to promote the restructuring of the enterprise sector both to improve the operation of existing enterprises and to foster new business startups and entrepreneurship.** As discussed in the macroeconomic section, Romania’s efforts to continue its bold reform of the SOE sector, particularly in energy and infrastructure, together with its efforts to modernize its public administration, are essential. Moreover, business climate reforms that lower the cost of starting and closing a business, including regulations on business registration, insolvency and bankruptcy procedures, can allow high potential existing and new businesses to thrive and create jobs whilst others can “fail fast, fail cheap”. The experience of other EU10 countries such as the Baltics and Poland that have achieved significant improvement in some of these areas can offer useful guidance on success factors. Similarly, policies that facilitate and promote economic agglomeration and increase business density such as, better infrastructure connectivity and development of supply chains, are also essential for promoting the relocation of resources to more productive uses and eventually faster job creation.
10. **There is evidence that the tax and social benefits system and labor regulations in Romania do not always provide incentives to make work pay or accessible, especially for groups with looser labor market attachments.** In Romania, as in many countries across Europe, labor taxes and elements of the social protection system create disincentives to secure employment. This is captured by the so called “tax wedge”, computed by the OECD, which captures the income forgone by a combination of income labor taxes and lost benefits when taking on a formal job. For instance, if a person starts to work formally, even if only for one hour per week, some social

assistance benefits are fully withdrawn. This is currently the case with the Guaranteed Minimum Income program in Romania, and is customary for unemployment benefits. In addition, barriers and provisions in labor regulations do not make labor markets contestable for women, young and older workers, and ethnic minorities. They inadvertently exclude or discourage many from work. The latter groups face a “twin-problem”: disincentives to work (from labor taxes and social protection systems) and barriers to employment.

11. **Labor taxes in Romania affect low-wage earners disproportionately, being less progressive than in Western European and other OECD countries.** The tax wedge in Romania increases with wages but less sharply than in Western Europe (World Bank 2013b). On the contrary, a number of countries, such as Bulgaria and Montenegro, have flat labor income tax rates that tax any additional euro earned from work at the same rate, regardless of the level of earnings.
12. **The key is to address work disincentives for low-wage earners who tend to have a more elastic labor supply.** Many today work in informal jobs or in casual part-time jobs intended to supplement household income earned from either pensions or by the main bread winner of the family. These types of jobs more often than not pay enough when done in the formal sector. World Bank (2013b) suggests that there are two main avenues to change work disincentives: (i) better design of social benefits such as social assistance, unemployment and family and housing benefits in a way that rewards formal work; and (ii) lower labor taxation, with a focus on low-wage earners. The former entails reforms that make formal work pay and allow for a phased withdrawal of benefits as work income increases. That is, not every dollar earned formally should be subtracted from benefits one-to-one or lead to a complete withdrawal of benefits. The latter entails shifting taxation away from labor to others types of income, consumption, or property and assets. Given that labor taxation is fairly non-progressive in Romania, targeting labor tax reductions to low-wage earners is likely to be more effective than across-the-board tax reductions. This could be done through tax credits or so-called in-work benefits that provide grant tax breaks on condition of employment. The US Earned Income Tax credit is an example of this. Reforms should be fiscally neutral and take into account equity and efficiency impacts.
13. **Beyond work disincentives, several groups in Romania face additional barriers to productive employment which lead to exclusion in the labor market.** In addition to inadequate skills, discussed above, adverse attitudes and social norms, overly rigid working conditions, information and networks, represent obstacles to jobs search and impact the types of jobs disadvantaged groups obtain. A recent study for ECA countries finds high inequality of opportunity in access to employment in the region, related to individual’s circumstances such as gender, parental education and self-reported minority status.<sup>4</sup> Women earn, on average, 30 percent less than men in Romania, regardless of their age, education and location. Employment rates for Roma men and women are 42 and 19 percent, respectively, significantly below the employment rates of men and women in the general population. This and the fact that Roma earn much less than the general population implies that the average productivity of working age Roma men in Romania is estimated to be far below that in the general population.
14. **Romania would benefit from smarter active labor market programs that rely on tools and processes for systematic, data-driven, profiling of beneficiaries.** These would aim at identifying those that are hard-to-serve, hard-to-employ, and those on social benefits, and then devising support services and interventions that could address the employment barriers faced by various groups. Such mechanisms are increasingly common in the EU15 countries. Countries are

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<sup>4</sup> Abras et al. (2012).

also looking to consolidate access to employment services and social benefits under one window, or as additional support for job searches. The UK's Jobcentre Plus is an example of this. It provides career advice, access to job vacancy databases, occupational training, sector based work academies, and access to internships, apprenticeships and volunteer programs.

15. **Selected use of rigorous impact evaluations can promote the most cost-effective active labor market programs for Romania to achieve its Europe 2020 employment target.** For example, of the existing impact evaluations on the effectiveness of active labor market programs, some are more rigorous than others. The available global evidence indicates that the impact of active labor market programs is mixed. A recent review of approaches to improving labor market outcomes for unemployed people found: (a) subsidized public employment is relatively ineffective; (b) job search assistance (which is often the least expensive) is more likely to yield positive results, especially in the short run; (c) classroom and on-the-job training is unlikely to yield positive impacts in the short run but is likely to yield relatively positive impacts over the medium term (two years). The European Commission recently instituted a Progress Facility that finances social policy randomized evaluations. And, several EU15 countries (e.g. France, Denmark, and the UK) are systematically using these evaluations to design smarter evidence-based policies.
16. **When Romanian employers complain that workers do not have the right skills, they are not just reflecting on education credentials or technical qualifications. More than ever workers are matched to jobs based on a multiplicity of skills not just their educational qualifications. Employers value both generic and technical skills.** The former comprise cognitive skills (e.g., literacy, numeracy, problem-solving) and socio-emotional skills, also called “soft” or “non-cognitive” (e.g., self-discipline, perseverance, dependability, teamwork). Technical skills refer to vocational and career qualifications and job-specific skills. There is mounting evidence that employers in advanced and emerging economies see the lack of socio-emotional (soft) skills at least as binding as the lack of cognitive and technical skills. This was also strongly noted in focus groups discussions with employers in Romania conducted as background for this study. Similar evidence from employer surveys in OECD countries and other middle income economies point to the importance of generic cognitive and socio-emotional skills aside from technical skills in firms' hiring decisions. Several studies, using new labor force data that include measures of these skills, have found that they are rewarded as much as cognitive skills by labor markets in the US, Europe and other emerging economies. In many of these countries there has been a dramatic rise of jobs in occupations that are more intensive in higher-order analytical and organizational skills (non-routine cognitive and interpersonal skills), dubbed “new economy skills”, and a sharp decline of those intensive in skills associated to repetitive and manual tasks.
17. **It would be important for the Romanian government to encourage employers and training providers to undertake rigorous impact evaluation of new training initiatives.** These should include sound cost-benefit analysis and also provide for learning about the duration of program impacts. Most evaluations of Active Labor Market Programs (ALMPs) in Europe provide only a year or two of follow-up. The available evidence on longer-term impacts for the US suggests that sometimes impacts remain remarkably steady over time for years after an intervention, whilst at other times they fade out, or can appear only belatedly.
18. **On the supply side, the quality of education in Romania is not in line with expectations given the level of development.** This diagnosis holds when considering all the recent

international assessments such as PISA, PIRLS<sup>5</sup> or TIMSS.<sup>6</sup> In fact, Romanian performance in all international assessments covered has either stagnated or deteriorated despite significant economic growth (GDP per capita, see the macro-economic section) and, at least partial, improvement of ‘socio-economic conditions’ according to PISA. National (Baccalaureate) exams in Romania support the problematic findings of international assessments. In fact, half of the students taking the Baccalaureate exam in 2012 failed, indicating deterioration in the provision of human capital desperately needed for modernizing the Romanian economy.

19. **The inability to improve the provision of basic skills to younger generations is very likely to limit the quality of the higher education system and to impede economic growth in the long-term.** If Romania had been able to bridge the education quality gap with the OECD by 2009, per capita income could be 25 percent higher by 2020.
20. **The socioeconomic conditions of children do matter for their academic achievement.** Disparities between ethno-linguistic groups are significant and could be at least partially reduced. At least half of the performance gap in reading of ‘dialect’/minority language-speaking students could be eliminated, especially by reducing social segregation in schools. Spatial disparities are also significant as students living in big cities and urban centers are more likely to benefit from a more favorable school environment than those living in rural areas. Expanding access to pre-primary education and improving the quality of teaching practices in rural schools could partially reduce the gap.
21. **The most problematic message from PISA 2009 is that 40 percent of Romanian students are functionally illiterate** (note: students who are still in the education system). These students are likely not to integrate into the labor market, will face social and economic problems and might not be fully able to organize their further learning throughout their life-cycle. This is not a temporary problem but a problem which is likely to persist throughout their lives.
22. While it might not be possible to change ‘social factors’ in the short run, **education policy makers could focus their efforts on ensuring de-facto desegregation, enrolment in facilities for early childhood education and improvement of learning strategies** of socially excluded students. Overall, it might be beneficial for the system to refocus on learning for all, as opposed to selectivity and supporting the best students, which seems to be a strong driving principle in some Central and Eastern European countries.
23. In addition it will be necessary to **reconsider financing levels for different education sub-sectors, the role of teachers and learners** in the education process and the incentives within the system, in particular for the teaching profession. The report discusses this in detail.

Finally, **Romania can enhance the results focus of its policies and more generally promote greater evidence based policy making through better systems of monitoring and evaluation.** Strengthening the institutions promoting evidence based policy making is an area with great potential to ‘turn on the lights’ (Sondergaard, Murthi 2012) and to result in stronger sectoral policies. The report discusses, inter alia, approaches for measuring the impact of Active Labor Market Policies or Early Childhood Interventions. Steps such as comprehensive tracking of graduates can provide crucial feedback for the education sector. The final section of the report provides a broader overview of the pay-offs a more comprehensive approach to monitoring and evaluation could have.

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<sup>5</sup> Progress in International Reading Literacy Study.

<sup>6</sup> Trends in International Mathematics and Science Study.

## I. Introduction

24. **Employment and skills are at the core of Europe 2020, the European Union’s competitiveness strategy, and are decisive for high productivity and sustained growth.** Romania has overcome significant challenges on its path to EU membership and in the early years thereafter. However, the Romanian economy has recently come under pressure as a result of the economic crisis and because important reforms in employment and education have not yet been completed.
25. **The Europe 2020 Romania report discusses the key challenges currently faced by the Romanian government in the area of productive employment, and proposes a set of steps the Romanian government could consider in order to reach the Europe 2020 targets.** Building on past and ongoing World Bank work, in particular in the areas of macro-economics<sup>7</sup>, the report uses household and firm-level data to identify bottlenecks to the creation of productive jobs and the supply of relevant and quality skills. In laying out a road map to overcome these barriers, it emphasizes evidence-based policy making: a) by elaborating on the use of impact evaluations for policy formulation and implementation in the Europe 2020 context, b) by giving concrete examples of policies which have worked elsewhere and c) by providing specific examples of possible Impact Evaluations for suggested policy options in Romania. Policy recommendations are presented at the end of the report.

**Table 1: Europe 2020 Strategy Targets – State of Play**

Overall Targets	Romania Targets	Romania, 2012 <sup>8</sup>
75% of the population aged 20–64 should be employed	70%	63.8%
3% of the EU’s GDP should be invested in R&D	2 %	0.48% (2011)
The share of early school leavers should be under 10%	11.3%	17.4%
At least 40% of 30–34-year-olds should have completed tertiary education	26.7%	21.8%
Reducing the number of people at risk of poverty or exclusion by 20 million in the EU	Reducing by 580.000 the number of people at risk of poverty and social exclusion, by 2020, as compared to the year 2008, meaning a reduction by approx. 15% of the number of	-240.000 people (23.4% in 2008 compared to 22.2% in 2011)

<sup>7</sup> This includes the Country Economic Memorandum (CEM, 2013) and ongoing World Bank work in the area of Impact Evaluations. The macro-economic section of the Europe 2020 Romania report will build on existing research and ongoing World Bank work while exploring in detail the contribution of employment and skills and the development of evidence-based policies for growth and productivity enhancement. The report does not intend to provide a comprehensive discussion of growth models or the role of capital investments for growth. It will, however, identify areas for further research.

<sup>8</sup> The table provides the latest data available on the EC website ([http://ec.europa.eu/europe2020/europe-2020-in-your-country/romania/index\\_en.htm](http://ec.europa.eu/europe2020/europe-2020-in-your-country/romania/index_en.htm)). In general, these are data for 2011; however, for the R&D and poverty targets these are 2010 data.

	people living in poverty <sup>9</sup>	
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Source: European Commission ([http://ec.europa.eu/europe2020/europe-2020-in-your-country/romania/index\\_en.htm](http://ec.europa.eu/europe2020/europe-2020-in-your-country/romania/index_en.htm))

26. **While Romania has seen sound economic growth, it performs less well than most other EU member states on many Europe 2020 targets. Particular challenges are posed by a persistently low employment rate**, which at 63 percent is amongst the lowest in the EU10.<sup>10</sup> While this has remained stable overall, it has slightly declined in recent years. The national Europe 2020 employment target is 70 percent, as compared to the overall target for the EU of 75 percent. It will require concerted national efforts to reach this target as well as tailor-made approaches to bring inactive groups of the population back into the labor market.
27. **The situation is aggravated by the fact that Romania has one of the lowest productivity rates in the EU<sup>11</sup>**, second lowest only to Bulgaria, as well as a **rapidly aging population**. The challenge is thus not only how to increase labor force participation but also how to make the labor force more productive.
28. The World Bank’s “Golden Growth” report<sup>12</sup> has noted key challenges to Europe’s competitiveness, that clearly apply to Romania, in particular that *‘[m]ost countries in Europe are not making the best use of their scarcest asset: workers. European countries must offset the impending labor force decline by increasing the labor force participation of people of all ages, regardless of gender, ethnicity, or socioeconomic background. They must also increase labor productivity, especially by equipping workers with more generic skills that allow them to redeploy their human capital more flexibly across jobs.’* (ibid.).
29. **Skills remain a major challenge. In particular, there is insufficient provision of the higher level generic and technical skills needed for a modern and competitive economy, including skills for technological innovation and absorption of new technologies.** While Romania performs comparatively well in terms of higher education participation rates, there are concerns about early school leavers and the quality of provision, in particular at the tertiary level, but also at earlier stages. A recent PISA study has shown that 40 percent of those 15 year olds who are still in education in Romania are functionally illiterate (while there are little reliable data, this will most likely already exclude a significant percentage of Roma students). Concerns have also been raised about the quality of higher education. While unemployment of tertiary education graduates is still significantly lower than for other attainment groups, employers increasingly raise concerns about the workers ‘lacking the right skills’ amongst workers, which refers to both

<sup>9</sup> For the monitoring of the national target, Romania has chosen the indicator is “at risk of poverty after social transfers”.

<sup>10</sup> For a discussion on the impact of improving employment and education conditions on poverty and social exclusion indicators see *Poverty Prospects in Europe: Assessing Progress towards the Europe 2020. Poverty and Social Exclusion Targets in New European Union Member States* (World Bank 2013). The report sets out to answer the question: will achieving the Europe 2020 national targets on employment and education lead countries to achieve the Europe 2020 poverty and social exclusion target with no other policy interventions? To answer this question, the authors present a simple partial equilibrium model flexible enough to be implemented in a number of different settings using widely available household survey data. The simulation model analyzes poverty and social exclusion outcomes in response to changes in education completion rates and employment rates and has been applied in ten of the European Union’s New Member States, including Romania.

<sup>11</sup> See discussion on labor productivity levels in the EU in Gill, et al. (2012)

<sup>12</sup> Gill, et al. (2012)

technical and vocational skills as well as generic skills, i.e. transferable skills (the ability to organize one's own work and learning process, cognitive skills, communication and organizational skills).

30. The European Commission therefore concludes that Romania has made limited progress concerning the national targets under the Europe 2020 strategy in 2011 and that some of the targets remain difficult to attain. *'This is the case in particular for investments in R&D, the employment rate, the early school leaving rate and the number of people at risk of poverty or exclusion. Romania should step up efforts to accelerate the delivery of the Europe 2020 strategy as the basis for any new growth initiative.'* ([http://ec.europa.eu/europe2020/europe-2020-in-your-country/romania/index\\_en.htm](http://ec.europa.eu/europe2020/europe-2020-in-your-country/romania/index_en.htm))
31. The report provides suggestions on how the challenges listed above can be addressed and which measures could be implemented to help Romania move towards sustained and healthy growth. The following section will elaborate on the importance to have sound macro-economic policies in place, including a business-friendly environment and efficient public administration. However, Romania will need to move beyond these policies in order to promote the creation of productive employment and sustain inclusive labor markets. In particular it will need to<sup>13</sup>:
  - Take further steps to develop a skilled, adaptable and productive labor force;
  - Make 'work pay' by providing the right incentives for (and removing barriers to) higher participation in the labor market during a time of demographic transformation; and
  - Put an emphasis on job creation while paying attention to the evolving demand for skills.

How this can be achieved will be the topic of sections on employment and education and skills development. The report will finally discuss the importance of moving towards a more-evidence based approach to policy making and will provide specific ideas and examples in this regard.

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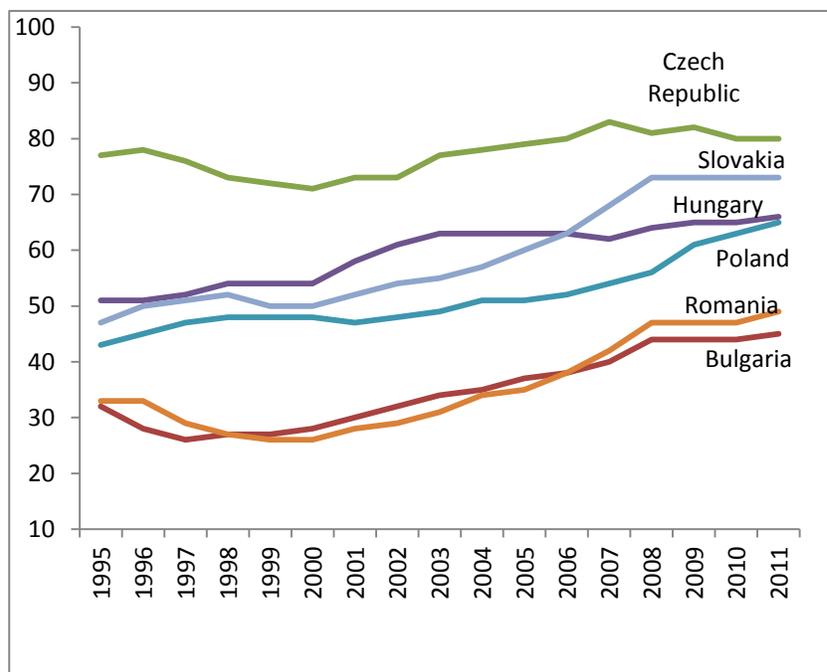
<sup>13</sup> See Figure 19 employment section for determinants of employment prospective in Romania – a two pillar approach. The question of employment creation will be discussed in the macro and in the employment section, though from different (macro and micro) perspectives.

## II. The Macroeconomic Context<sup>14</sup>

### The pre-crisis period

**Figure 1: GDP per capita, EU-27 = 100% (at PPS)**

32. Anchored by the process of EU accession, Romania made remarkable progress during the pre-crisis period towards convergence with the other EU member states in terms of income and living standards. During the period 2001-2008, the Romanian economy expanded by an average of 5-6 percent per year, representing one of the fastest growth rates in the European Union (Figure 1). While the process of convergence was slowed somewhat by the arrival of the global economic crisis in 2008, nevertheless it continued. Thus, in 2011 Romania's income per



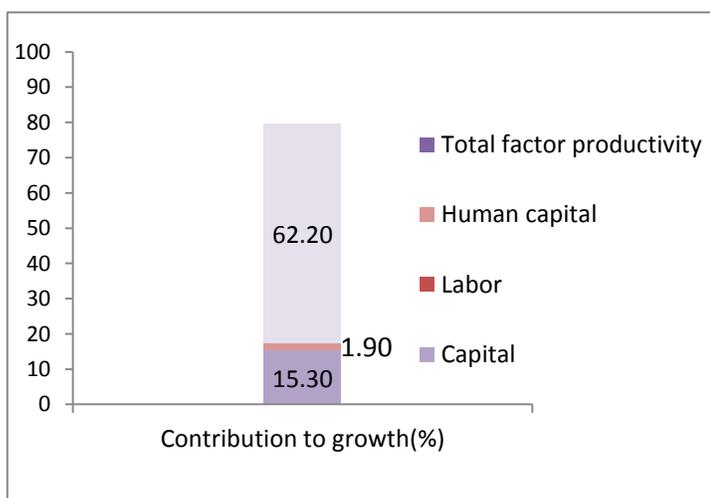
capita reached around 48 percent of the EU 27 average, up from a trough of 26 percent a decade before. Growth led to significant gains in poverty reduction, and improvements in social and economic indicators.

33. **Productivity growth has been the main driver of the “catching up” process over the last decade.** As Figure 2 suggests, total factor productivity (TFP) contributed solidly, representing over 60 percent of economic growth during the period 2003-08. The proportion that is capital is significantly lower (around 15 percent). The robust growth in productivity was driven by important FDI inflows, spurred by the prospects of EU membership and the adoption of the *acquis communautaire*. The foreign investment inflows brought not only financial resources and access to markets, but also contributed substantially to the transfer of technology and knowledge, with beneficial impact on productivity. In contrast with the remarkable pick up in TFP, the contributions of the labor force and human capital development to economic growth have been minimal. These reflect the negative dynamics of demographics and labor participation, including the large external migration of workers during the period of analysis, and the challenges of the education system and associated human capital development (see sections on Employment and Education and Skills Development for detailed analyses).

<sup>14</sup> The chapter was prepared by Catalin Pauna.

34. **Productivity gains facilitated the diversification of the economy and boosted export performance.** The establishment of foreign companies in Romania and the associated FDI inflows, of around 5-6 percent per year in the years prior to 2008, gave a tremendous boost to exports, which increased spectacularly both in volume and technological complexity. Thus, the value of exports expanded from Euro 14.7 billion in 2002 to an estimated Euro 45.3 billion in 2011. Similarly, the share of the medium and high technological complexity goods and services in total exports jumped from around 27 percent in 2000 to around 54 percent in 2010 (Figure 3). It is estimated<sup>15</sup> that over 50 percent of exports currently come from around 100 large companies, of which 97 are foreign owned or controlled. While this performance is truly remarkable, it can be further enhanced, Romania still has one of the lowest shares of exports in GDP among the new EU members.

**Figure 2: Growth break down for Romania, 2003-08**

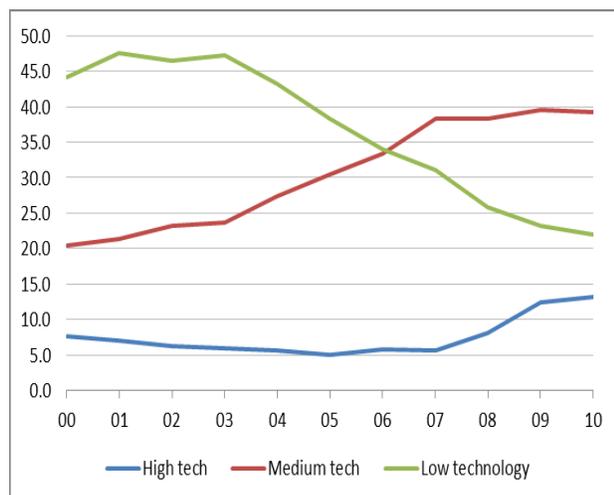


Source: World Bank estimates based on national statistics

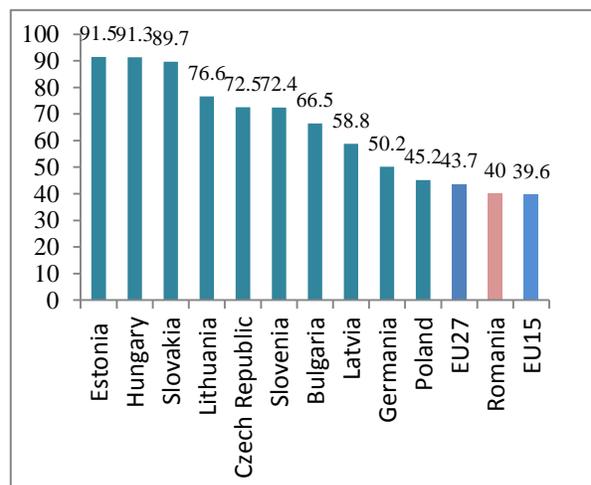
35. **The demand-driven rapid economic growth enjoyed was, however, accompanied by widening internal and external imbalances.** Facilitated by the opening of the capital account and the privatization of the banking sector, growth was fueled by large external capital inflows, including FDI and short-term debt. Credit to the private sector advanced by an annual average of 50 percent prior to 2008. The inflow of abundant financial resources led to excessive growth in domestic demand, which expanded by 10-11 percent per year during the period 2003-08, well above GDP growth and the largest growth across the new EU members (Figure 5). Private consumption and investments in non-tradables constituted major destinations of these inflows.

<sup>15</sup> According to the Association of the Romanian Exporters.

**Figure 3: Share of high, medium and low tech exports (%), 2000-10**



**Figure 4: Exports of goods and services (% of GDP, 2011)**

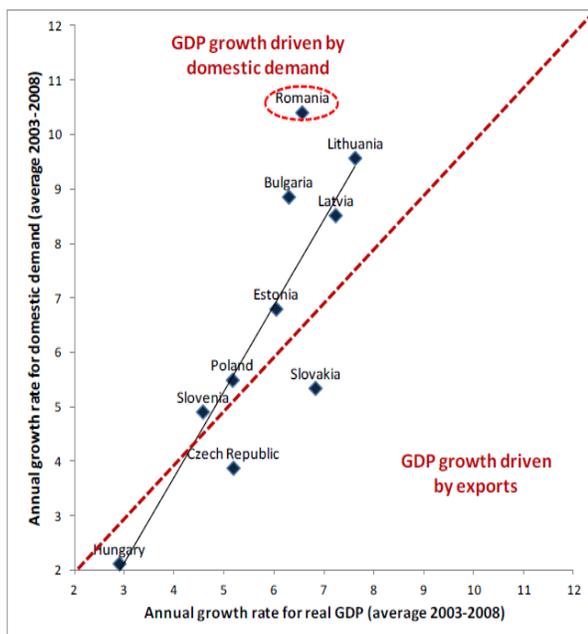


Source: World Bank staff calculation

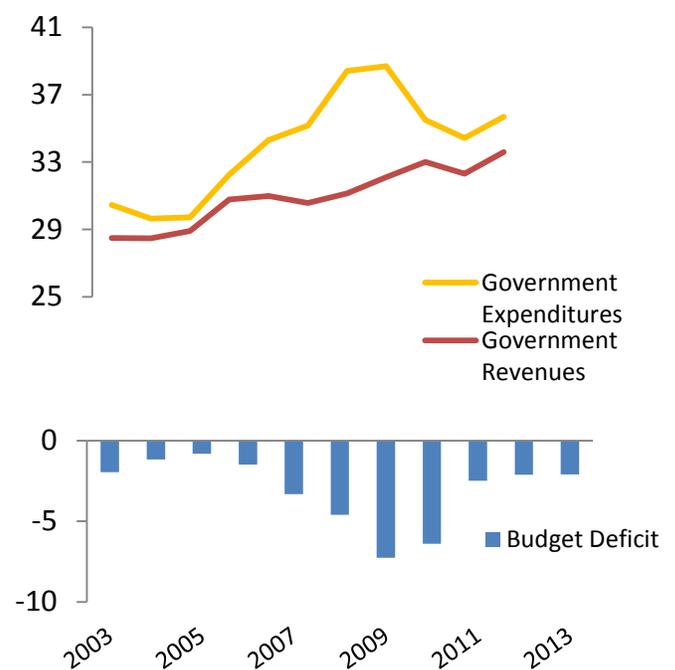
36. **As the economy was overheating, government spending was also on the rise.** During the period 2004-08, public spending increased by around 6 percent of GDP, of which 80 percent was current spending, mainly public sector wages and pensions. The public sector wage bill expanded by around 60 percent in real terms in the period 2004-08. **At the same time, budget revenues remained stationary** at around 32-34 percent of GDP, putting substantial pressure on the fiscal deficit, which reached 7.3 percent of GDP in 2009 (Figure 6). The increase in public sector wages spilled over into the private sector, triggering a rapid hike in the economy-wide wage inflation, harming external competitiveness. The consequence of the spending exuberance of both the private and public sectors during the pre-crisis period was the development of unsustainable external (current account) and internal (fiscal) imbalances, which became major vulnerabilities of the economy in the face of the global economic crisis.
37. Widening imbalances exposed Romania to the global economic crisis, depressing growth and affecting macroeconomic stability and forcing the Government to adopt adjustment measures. Facing financing difficulties, the Government embarked in 2009 on a major macroeconomic stabilization and structural reform program. It was supported by the IMF, the EC, the World Bank and other international institutions, through a Euro 20 billion 24-month multilateral financial package. The program consisted of a comprehensive set of adjustment measures, which included tax increases (VAT, social contributions) and public expenditure cuts (public sector wages, pensions, social assistance spending), accompanied by a number of structural reforms in public finance, pensions, health and education.
38. **The implementation of the adjustment measures and prudent macroeconomic management gradually began to yield results.** In 2011, the economy started to recover, albeit at a modest pace. Real GDP grew by 2.5 percent in 2011 aided by strong performance in agriculture and exports. The worsening economic conditions in the Eurozone, which re-entered recession, and a severe drought affecting agricultural output depressed growth again in 2012, although it still remained in positive territory, at an estimated 0.7 percent. The current account deficit adjusted rapidly from 11.6 percent of GDP in 2008 to 4 percent in 2012 and it is expected to stabilize at 3-

4 percent of GDP over the medium term. The budget deficit has also gradually come down to around 2.2 percent of GDP in 2012, and it is expected to be further contained in the medium term, as Romania has to adhere to its commitments under the EU Fiscal Compact. The stable macroeconomic conditions have enabled Romania to return to the international markets to cover its financing needs at reasonable and declining costs. A second 24-month support program was signed with the IMF, the EC and the World Bank in early 2011. The program is of a precautionary nature and no resources have been drawn.

**Figure 5: Domestic demand vs. GDP growth, 2003-08**



**Figure 6: Budget expenditure, revenues and deficit (% of GDP)**



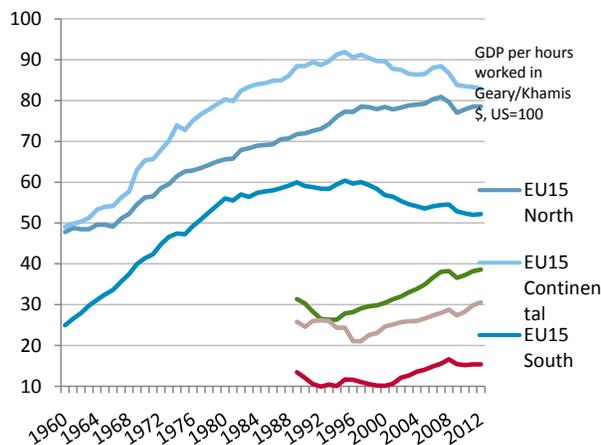
Source: Romania CEM, from the Romanian Fiscal Council

**Towards a new development model:**

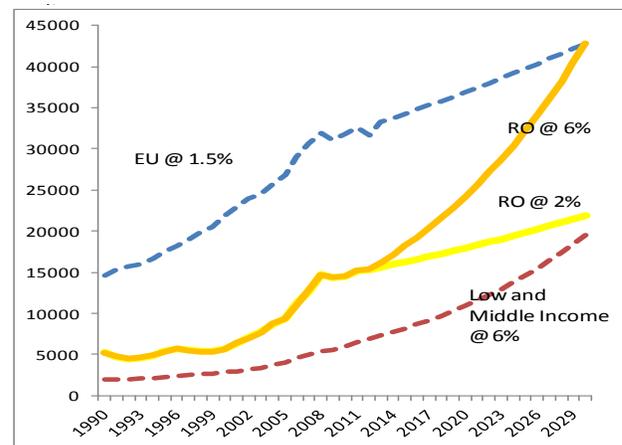
39. **The severe impact of the crisis on the economy and the timid subsequent recovery point towards the large unfinished structural reform agenda which needs to be addressed.** In spite of the good progress made over the last decade, Romania continues to lag behind other EU members in terms of competitiveness and productivity (see Figure 7 for EU15 South). These gaps are largely attributable to delays in addressing important structural rigidities of the economy and to the stop-and-go approach to reforms characteristic of the past. Important resources remain trapped in low value added activities affecting the long-term economic growth potential of the

country. A World Bank study<sup>16</sup> estimates, for example, that Romania's exports and GDP could increase by 29 and 27 percent, respectively, if the targets of the Europe 2020 Strategy for employment, education and R&D were achieved.

**Figure 7: Productivity dynamics relative to the US**



**Figure 8: Convergence scenarios for Romania's GDP per capita (in US\$), 1990-2030**



Source: World Bank Golden Growth report

40. **Reviving the structural reform agenda would avoid locking Romania into a medium term low growth path.** The unpromising external economic environment and the low appetite of the investors for taking long term positions in markets perceived as risky means that one of the drivers of Romania's growth in the past, the global capital inflows, will not spur the economy, possibly for a number of years from now. Many analysts estimate a medium term growth potential of Romania of around 2 to 3 percent per year, which is insufficient to close the gap with the rest of the EU. Evidence suggests that TFP has been on the decline in recent years, concomitant with a sharp reduction in FDI inflows<sup>17</sup> and an anemic labor market.
41. **On the other hand, the convergence process can accelerate if Romania focuses on mobilizing domestic resources for growth and unlocks the value trapped in low productivity activities.** Simulations indicate that if Romania is to recover the growth levels characteristic of the pre-crisis period, of around 6 percent per annum, it should be able to close the gap with the rest of the EU within the next twenty years (Figure 8). A number of recent studies<sup>18</sup> point to the fact that important policy and institutional rigidities obstruct the development of the private sector and allocate large public resources to inefficient ends. To

<sup>16</sup> "The Economic Effects of the Lisbon Agenda Targets: The Case of Croatia" background paper by A. M. Lejour et al. for the "Croatia E.U. Convergence Report: Reaching and Sustaining Higher Rates of Economic Growth".

<sup>17</sup> FDI inflows have declined from 6.7 percent of GDP in 2008 to an estimated 0.9 percent in 2012.

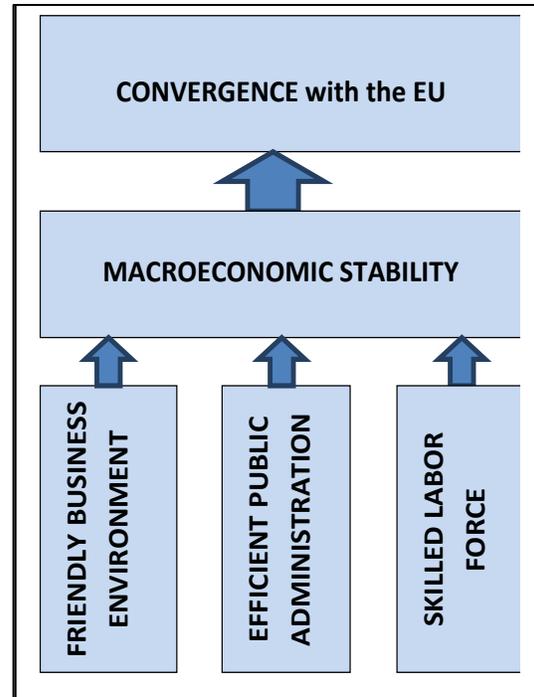
<sup>18</sup> The Romania Country Economic Memorandum (2013). and World Bank (2011a) and (2011b).

release these resources requires political determination, as well as strong prioritization and planning capacity and policy coordination.

42. **A comprehensive productivity-centered reform agenda aimed at enhancing the long term economic growth potential of Romania should thus rest on four pillars:** The first three pillars: a) a stable macroeconomic environment; b) a friendly business climate; and c) an efficient public sector are covered in the Romania CEM (2013): *Reviving Romania's Growth and Convergence: Challenges and Opportunities*, and therefore the discussion of these is not expanded here. The fourth pillar, a skilled labor force, is the subject of this report.

I. **Further consolidate macroeconomic stability.** Building on the gains achieved in recent years, macroeconomic policy should continue to target the reduction of the internal and external imbalances. Experience indicates that a proper mix of coherent macroeconomic policies should allow the mobilization of the domestic resources for growth, as in other countries in the region, such as Poland, Czech Republic, or Slovakia, reducing the reliance on the external inflows of funds and thus the associated vulnerabilities and risks. A disciplined fiscal policy would ensure a sustainable downward trajectory for the budget deficit and facilitate access to financing from the markets at reasonable costs. This would allow Romania to meet its commitments, as a signatory of the EU Fiscal Compact. Income policies should contain increases in wages to match productivity gains, thus avoiding the occurrence of wage-price spirals characteristic of the past. The approach to monetary policy should focus on price stability and on ensuring that the exchange rate dynamics reflect economic fundamentals.

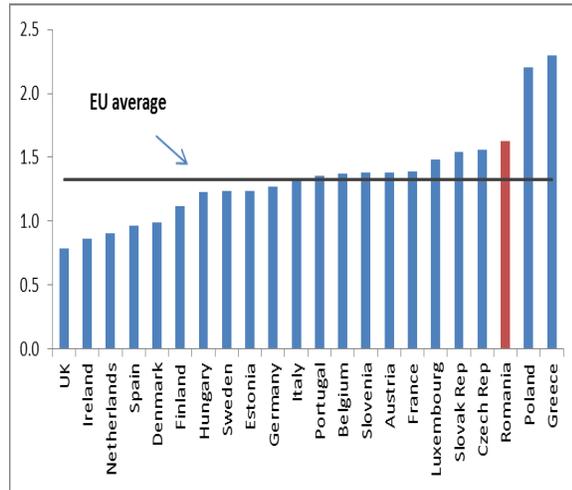
**Figure 9: Pillars of the agenda for growth and convergence**



**II. Continue to streamline the business environment for private sector development.**

Evidence indicates that the regulatory environment for businesses is among the most cumbersome in the EU. In the OECD Product Market Regulation (PMR) index (Figure 10), which captures the flexibility of the product markets, only Poland and Greece have a lower score than Romania in the EU. Similarly, in the recent *Doing Business 2013* Romania ranks 72, down from 63 in 2012, with only Italy and Greece trailing behind in terms of

**Figure 10: Product Market Regulation, EU countries**

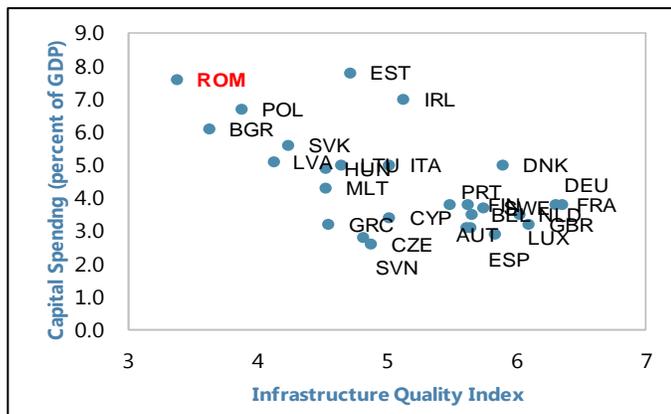


ease of doing business. To give the private sector the breathing space it needs to develop, the reform agenda should aim at improving the transparency and predictability of the business climate and at reducing the transactions costs for companies. Measures should focus on: reducing the taxation burden on companies through tax policy and tax administration actions; simplifying procedures for opening, operating and closing companies; consolidating the capacity of the markets regulators and ensuring more effective coordination between them; developing e-government services for businesses; and eliminating discretionary implementation of regulations and the uneven enforcement of rules.

**The continuing large-scale presence of the state in the economy represents a macroeconomic risk factor and distorts the functioning of the markets.**

Estimates put the number of SOEs at more than 760, and they generate over 10 percent of GDP and employ 10 percent of the labor force. The SOEs have a large presence in a number of sectors, including in energy, transport, mining, water supply, etc. The restructuring of SOEs has advanced at a slow pace and public sector enterprises continue to trap resources in low productivity activities. They represent a major source of arrears in the economy, of up to 3 percent

**Figure 11: Efficiency of capital Spending in the EU-27, 2011**



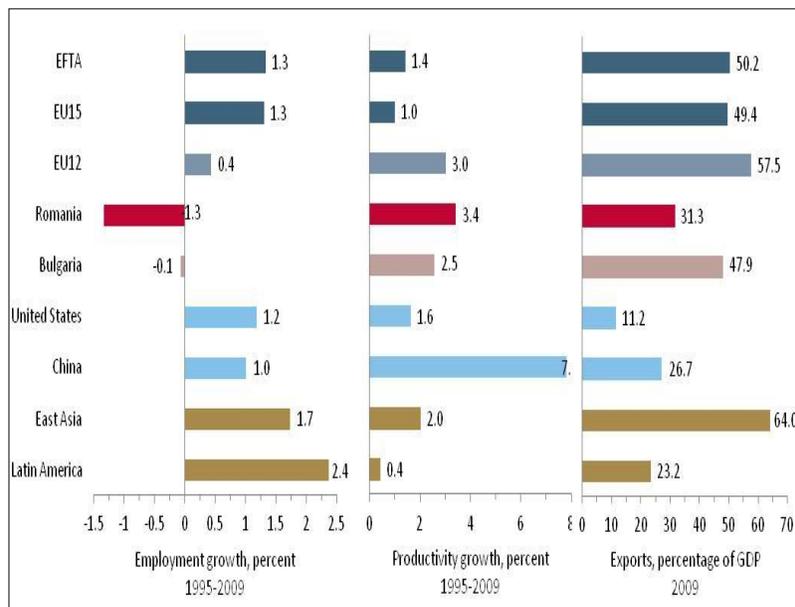
Source: Eurostat; World Competitiveness report

of GDP and distort competition through their market behavior and the lax budget constraints enjoyed. Improving the performance of the SOE sector by imposing hard budget constraints is critical for improving productivity and boosting the competitiveness of the Romanian enterprise sector. The Government has embarked on a bold reform of the SOE sector, by upgrading governance standards, appointing professional managers and boards and privatizing and selling state assets, although the process is in its early stages.

III. **Modernizing the public administration to improve the allocation of public resources as part of an agenda for better governance.** Evidence indicates a substantial misalignment between the level of resources used by the public sector and the results achieved. While, for example, public investment has been the highest in the EU over the last decade, measured as a share of GDP, Romania scores the lowest in infrastructure endowment (Figure 11). This low public sector efficiency points towards persistent institutional and process weaknesses which undermine public policy conduct. The reform of the public sector should target the strengthening of the linkages between priorities and resources to ensure that money is well spent and the quality of public services is appropriate. Reform should focus on identifying the long term development priorities of the country. They should ensure there is an appropriate policy framework in place to respond to the priorities, that policies are coordinated and properly monitored and that the budget formulation and execution process responds to the policy agenda. The budget should gradually introduce elements of performance and move towards a multi-annual framework.

IV. **Increasing labor participation and upgrading the skills of the labor force.** A characteristic of Romania's growth model of the pre-crisis period was the absence of an upward trend in labor participation, especially for some labor categories, such as youth or women. This happened in spite of the remarkable economic growth enjoyed for a number

**Figure 12: Growth in Employment Productivity and Exports, 1995-2009**

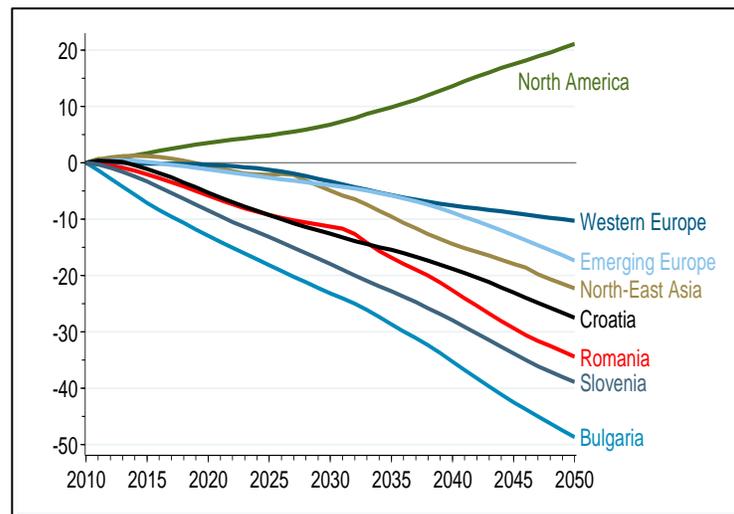


of years. A survey of the manufacturing sector during the period 1995-2009 (Figure

12) shows, for example, that while there have been important gains in productivity at the level of companies and increases in exports, they came concomitantly with a decline in employment. The poor performance in overall labor participation is partly explained by the decline of the traditional industrial sector (mining, heavy manufacturing) and agriculture, which destroyed a large number of jobs during the transition. However, the other significant explanations are ongoing labor market rigidities, low internal mobility and skills mismatch, as the report documents in the following sections.

43. **As in the rest of Europe, aging and the decline of the working age population represent formidable challenges to sustaining long term economic growth.** Between 1990 and 2011, Romania's population declined from 23.2 million to around 21.3 million. During the same period, the occupied population shrank from 10.8 million to an estimated 9.1 million. Over two million people of working age, or around 25 percent of the labor force, are estimated to have emigrated in search of better job opportunities in Europe and elsewhere. The full opening of the European labor market to the Romanian workers on January 1<sup>st</sup>, 2014 is expected to lead to a further outflow of labor and skills. Moreover, recent projections (Figure 13) indicate that, under the baseline scenario which extrapolates the current trends, Romania's working age population will continue to decline rapidly over the coming decades. Thus, by 2050, the working age population would shrink by over 30 percent relative to 2010, three times faster than the average for Western Europe, with further negative implication for the long term economic growth potential and the sustainability of public finances.

**Figure 13: Working Age Population Projections, 2010-2050**



44. **Low labor participation negatively affects both short term growth as well as the long term economic potential of a country.** Low participation means that, on one hand, out-of-the-labor force working age people do not generate value added and therefore do not contribute to output growth. On the other hand, the decline of the working age population already affects the balance of the public pension fund, which has been running deficits for a number of years. The restructuring of the economy and the drop in the working age population led to a dramatic decline in the number of the public pension contributors from eight million in 1989 to 4.6 million in 2000 and to 4.2 million in 2010. Concomitantly, the number of beneficiaries increased from two million in 1989, to 4.2 million in 2000 and to around 4.8 million in 2010. Implicitly, the ratio between contributors and beneficiaries shrank from 3.75 in 1989, to 1.1 in 2000 and to 0.9 in 2010, the lowest in the EU. Unsurprisingly, these adverse trends put a considerable pressure on the pension and health contributions which, together with the contributions to the unemployment fund, have reached around 44.5 percent of the gross average wage, one of the

highest ratios in the EU. Nevertheless, the increased contributions, together with a number of policy changes promoted by the government in recent years, including a partial decoupling of the pensions from wage dynamics, tighter eligibility conditions and a gradual increase in the retirement age, have failed so far to balance the pension fund. Thus, the fund has been running deficits which widened from 0.44 percent of GDP in 2008 to 2.1 percent in 2010 and to around three percent in 2012, with the gap covered from subsidies from the state budget. Given the magnitude of the imbalances and the anticipated trends in demographics and working-age population, it is unlikely that the pension fund will be able to correct its deficit even in the medium term, thereby diverting valuable resources from other public services, such as education or health, and putting constant pressure on the balances of the consolidated budget.

45. **With the revision of the Labor Code, the government took an important step to increase labor market flexibility.** The new Code makes it easier to hire and fire workers and the contractual arrangements for employment have been relaxed, with more emphasis being placed on temporary and part-time contracts. Amongst the new regulations introduced, a number of measures may have a significant potential to impact economic activity: operation of trade unions shall be regulated by law; trial periods were extended to 90 calendar days for operating staff, compared with 30 previously, and not more than 120 calendar days for management positions, compared to 90 previously; individual fixed term employment contracts which can be completed in 36 months, compared with 18 months previously; collective agreements can be more easily opened; and such agreements are not binding for non-signatory parties. Although it is too early to assess the full impact of the changes implemented, there is evidence of additional job creation in the formal sector as a result of the reforms.
46. **Skills shortages are a second major constraint to economic growth, together with labor participation.** Surveys of employers indicate endemic skills shortages, as graduates routinely leave the school system without the minimum knowledge levels needed to find a job. This explains the persistently high unemployment rates for the young, of over 20 percent, and the high probability of a graduate directly becoming unemployed (which is 60 percent of the probability of finding a job). While a number of notable legal and institutional changes to the education system have taken place, including the introduction of per capita financing and the strengthening of education standards, especially at tertiary level, problems of quality, efficiency and equity remain. In spite of a rapid increase in the number of university graduates, there are questions about the level of proficiency. Life-long learning is still rare in Romania, which is of particular concern, as skills tend to become obsolete increasingly rapidly due to technological change. Job creation in areas of high value added is difficult if the appropriate pool of skills is not there to respond to the demand from the labor market.
47. **Romania's agriculture sector can bring a substantial contribution to growth and poverty reduction, but its economic potential has not been exploited in full.** Romania has the highest proportion of the population deriving its main income from farm activities, incidence of (absolute) rural poverty, a gap in living and social standards between rural and urban areas, and among the lowest levels of competitiveness in agriculture. About 45% of the population and more than 70% of the poor live in rural areas. Around 28% of employment is in agriculture, compared to some 2% in EU15 and 3-14% in EU8. On the other hand, Romania is among the best endowed European countries in terms of land, water and people. Agricultural land occupies almost 62% of Romania's surface, and almost two-thirds of it is arable. Properly exploited, this endowment would allow significant increases in rural labor productivity while at the same time

releasing labor to other sectors facing shortages. This also would help secure real gains in reducing rural poverty and in reducing the income gap with urban areas.

48. **To become competitive and raise productivity, small and intermediate farms need to grow in size, and release excess labor.** That is challenging when too much land is tied up with older farmers, in particular on subsistence farms, and when excess labor remains on the farm without adequate skills, employment opportunities in nearby or easily accessible urban centers, or adequate social protection. Farmers beyond retirement age account for 43% of all farmers, and another 22% are older than 55. About 70% of the land held by subsistence farms is managed by heads of holdings 55 or older. With low pensions, and increasing food prices, there are few incentives for poor and old rural households to leave subsistence farming. This maintains over-employment in agriculture, keeps income low, and constrains the supply of land for farm restructuring and consolidation. The transfer of land from less to more competitive farms, through either sale or lease, is also complicated by the absence of secure land titles, sometimes unclear boundaries, and the high land survey and registration costs associated with land titling.
49. **Membership of the EU offers a tremendous chance to improve Romania's economic growth potential and the living standards of its citizens.** Accession into the EU in 2007 has opened to Romania, and to its Eastern European peers, a large window of opportunity. Access to the internal EU market of over 500 million consumers, increased institutional and policy integration at European level and more predictable and transparent rules and regulations have facilitated trade and investment and accelerated the process of convergence with positive impacts on job creation. Currently, around 70 percent of Romania's exports go to the EU and their technological complexity increases rapidly due to FDI inflows, most of which comes also from the EU. In addition, Romania benefits from large inflows of structural and cohesion funds, and more will come during the 2014-2020 financing cycle. Experience elsewhere in Europe shows that these funds, if used efficiently and allocated to areas of need, constitute a driver of the catching up process. Unfortunately, administrative capacity constraints have prevented Romania so far from making best use of these resources.
50. **Boosting economic growth and productivity and addressing the challenges highlighted in this report requires more effective policy-making.** Guided by the Europe 2020 strategy, Romania will need to ensure more effective and targeted resource allocation in the longer term. The periodic update of the National Reform Program, grounded in the Europe 2020 strategy, offers a good context to review policy priorities and identify short to medium term actions which respond to these priorities. Better inter-sectoral policy coordination can be achieved through the establishment of a monitoring and evaluation system for policy-making, managed by an entity in the government with a clear authority for this. A more strategic approach to resource allocation and a greater focus on addressing capacity constraints would place Romania in a more favorable position to reap the opportunities arising from the 2014-2020 EU programming period. Efficient communication with stakeholders of the reforms would help mobilize popular support for change.

### III. Facing the Employment Challenge<sup>19</sup>

51. As discussed in the previous section, **Romania can be proud of its achievements in terms of the strong economic and productivity growth from 2000 up to the crisis.** However, this strong economic performance failed to boost employment rates and prospects remain subdued as a result of the vulnerabilities of the economy in the face of the Euro-zone crisis. This section examines the factors behind this disappointing employment performance and the policies to address them.
52. **This section addresses two main questions:** Why have employment rates not improved in Romania? What policies are needed to change this and for Romania to achieve its Europe 2020 employment target?
53. **This section answers these questions in five steps using evidence derived from firm and labor surveys and existing studies.**<sup>20</sup> First, it documents the employment gaps in Romania and the groups most affected by low labor market attachment. Second, it examines the dynamics and constraints for employment creation and the related policy reforms that can enable a more thriving private sector that creates more jobs. Third, it discusses the extent to which skills are hindering employment and the demand for the types of skills - cognitive, socio-emotional, and technical - that are fundamental to the modern workplace. Fourth, it analyses both whether there are aspects of Romania's welfare system which undermine work incentives, and also the barriers certain groups may face in accessing jobs. There is consideration of the types of policies that can help in this area. Finally, the section outlines the main policy directions and priorities derived from the diagnostics and policy discussion. In the area of skills, this section focuses on policies directly related to skills building for the current stock of workers in the labor market, whilst the subsequent section focuses on education policy.
54. This section addresses a series of related questions: What is the employment situation in Romania? Is job creation being hindered? What are key obstacles to participation in the labor market? Are there aspects of the welfare system that undermine work incentives? Is the demand for skills changing? Is there evidence of skills shortages or mismatches? What suitable measures can be taken to tackle youth unemployment? How can employment opportunities be improved for other vulnerable groups, in particular older adults, women, and the Roma minority?
55. **The section concludes that Romania can achieve the Europe 2020 employment target through concerted reform efforts and specific policy measures.** Employment prospects in Romania hinge on further reforms to promote economic modernization and to create a more adaptable and productive workforce in the context of an aging population. This requires efforts under two pillars: (i) fostering job creation by private business growth and unleashing entrepreneurship, (ii) age-sensitive and evidence-based investments in post-schooling skills development and smart labor policies in the face of the country's demographic outlook. The key message is that restructuring is needed in order to achieve the EU2020 employment target, but it will lead to job destruction in the short term. Policies are needed to tap the potential to create new and more productive jobs and prepare workers to take advantage of these job opportunities.

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<sup>19</sup> The chapter was prepared by Omar Arias.

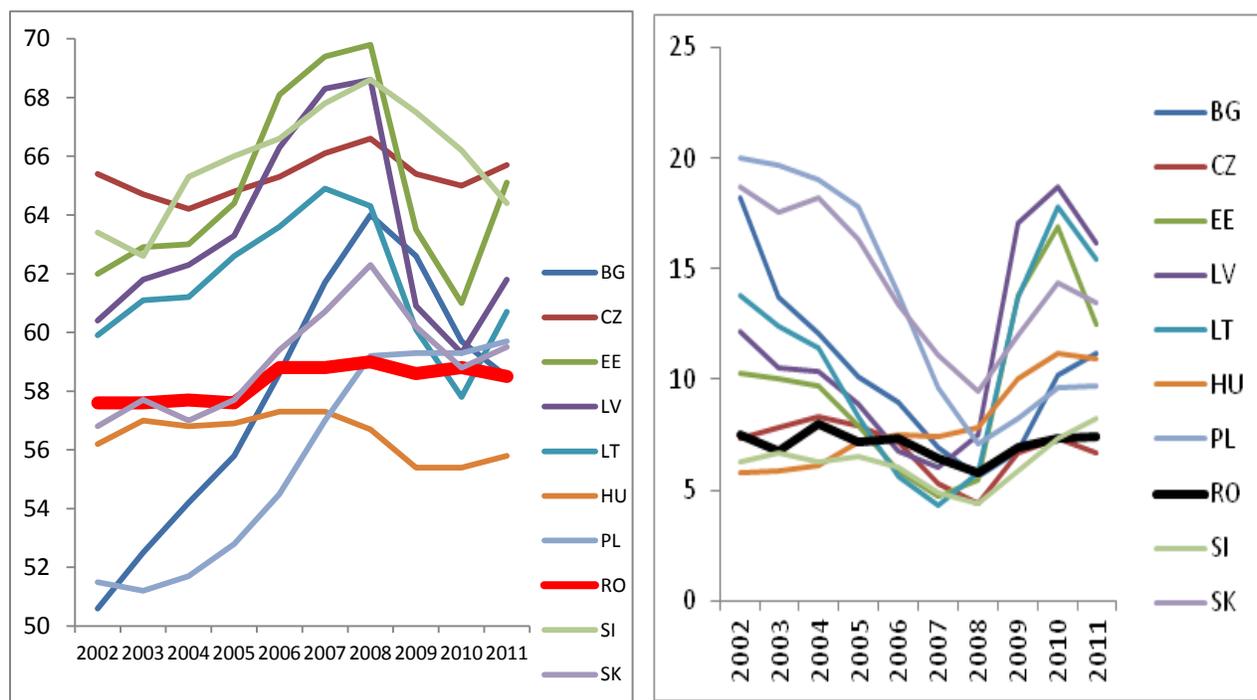
<sup>20</sup> The discussion draws from the analysis of the forthcoming World Bank jobs regional report, World Bank (2013b).

## The employment problem in Romania

### *Progress Towards the Europe 2020 Employment Target*

56. As discussed in the macroeconomic section, **the dynamics of labor market outcomes in Romania have been closely linked to the productive restructuring taking place in the transition to a modern market economy.** As with other economies in Eastern and Central Europe, in the earlier years of transition rapid restructuring initially brought rising unemployment, falling labor force participation, and an increase in informal employment<sup>21</sup>. Thereafter, in the late 1990s the association between growth and employment weakened and, as in other transition economies, there came a period of limited employment growth.
57. **Throughout the 2000s, Romania continued to exhibit nearly *net jobless growth*, while most EU10 economies grew their employment levels before the crisis.** As discussed earlier, despite high economic growth, employment levels barely changed in the last decade and fell only slightly with the 2008-09 crisis (Figure 14). Other than a small spike in 2006, the employment rate remained essentially flat. Unemployment has been slightly more responsive to the business cycle, falling modestly between 2004 and 2008 and then rising modestly with the financial crisis. In contrast, with the exception of Hungary, all New Member States (NMS) increased their employment levels significantly during the period.

**Figure 14: Romania's employment rate barely changed despite high economic growth**  
**Employment (left) and unemployment (right) rates, 2002-11**



Source: World Bank (2013a) based on Eurostat. BG=Bulgaria; CZ=Czech Republic; EE=Estonia; HU=Hungary; LT=Lithuania; LV=Latvia; PL=Poland; RO=Romania; SI=Slovenia; SK=Slovak Republic

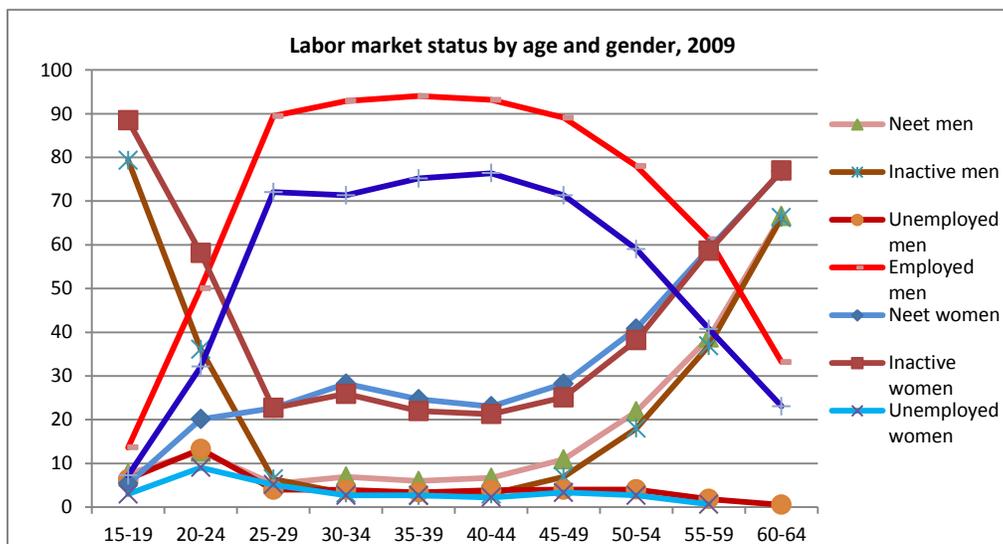
<sup>21</sup> World Bank (2005).

58. **In fact, while Romania’s employment record has been disappointing, the performance of its EU10 peers offers hopes that its Europe 2020 employment target is quite achievable.** Romania needs to increase its employment rate by an average of 1 percentage point per year over the next 7 years to achieve its target. This may be doable as shown by Estonia, Latvia and Poland, early reformers among the EU10, which managed to sustain an increase of employment at roughly this rate during 2002-2008. In fact, Bulgaria, which started with the lowest employment rate in the group, having joined the EU later than other NMS together with Romania, boosted its employment rate by an average of 2 percentage points per year up to the crisis. There are indeed relevant lessons from the EU10 experience and employment performance for Romania. Next, we examine which groups in the population face the largest gaps in employment and warrant a focus of policy efforts.

*Romania’s employment gaps*

59. **For Romania to achieve its Europe 2020 employment target it must increase its employment rates, starting with the labor force participation, of women, youth and older workers.** As shown in Figure 15, these are the groups, which exhibit the lowest labor market attachment. Above 90 percent of men aged 25-49 were employed in the eve of the international financial crisis, a rate comparable to other New Member States. Roughly 72 percent of women in that age range has jobs and nearly a quarter does not actively seek jobs and stay outside of the labor force. This is below the norms of female participation in the EU27 and several other EU10 countries. Employment rates fall dramatically for older individuals: 60 percent of men are employed in the age range 55-60 and barely one third in the 60-64 age range while the rates for women are around 40 and 25 percent, respectively. These largely reflect low rates of labor force participation as unemployment among these groups is relatively low.

**Figure 15: Romania’s employment problem is strongly correlated with age and gender. Percent of the working age population by each age group and gender, 2009**

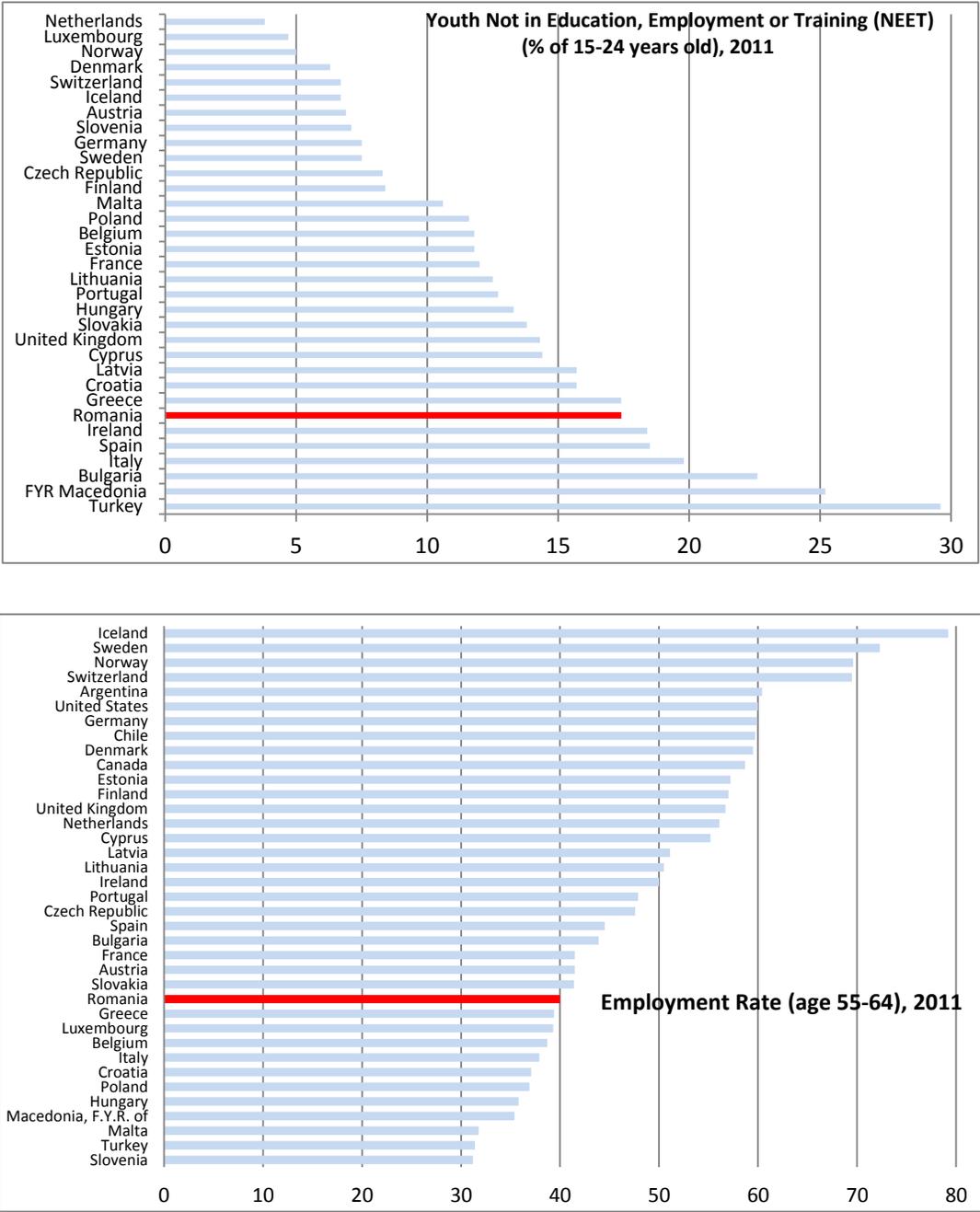


Source: World Bank staff based on EU-SILC data, 2009

*Notes:* All rates represent shares of the working age population, and hence the unemployment figures differ from the conventional unemployment rates which are measured as percentage of the labor force (those actively looking for jobs).

60. **The problem of joblessness is also acute among youth (aged 15 to 24), especially for women.** This reflects a mix of relatively high unemployment and inactivity (as measured by the NEET rate, i.e., those Not in Employment, Education, or Training). In 2009, about 20 percent of young women were in this situation and near 15 percent of young men (Figure 15). Youth inactivity rates increased further over recent years.
61. **The rates of inactivity of older workers and youth in Romania, especially for women, are among the highest in the EU and other emerging economies.** The NEET rates for youth fall in the range of those in Southern European countries and only Bulgaria fares worse within the EU10 (Figure 16). Youth unemployment is particularly high relative to adult unemployment which is lower in Romania than in other EU10 countries. The 40 percent employment rate for older workers puts Romania at the bottom of the EU27 alongside some Southern European countries and a few New Member States which also fare badly in this indicator (Figure 16). The 30 percent employment rate of women particularly is amongst the lowest.
62. **Low participation rates are more prevalent among certain disadvantaged groups.** For youth, inactivity is strongly correlated with low educational attainment (higher for those who drop out or do not complete secondary education), ethnicity (the Roma population) and rural residence. For older workers, low employment rates are more prevalent for the less educated (although they also drop for the better educated) and for those living in rural areas. Many older workers dropped out of the labor market after the economic transition of the mid 1990s which made it difficult for many to stay employed. Moreover, those who continued working through the transition, often dropped out of the labor force relatively early in their working lives, made possible by Romania's low and gender-differentiated retirement ages. Once older workers leave the labor market, it is increasingly difficult to get them back to work.

**Figure 16: Romania’s inactivity rates of youth and older workers are high by international norms. Percent of the working age population by each age group, 2011**



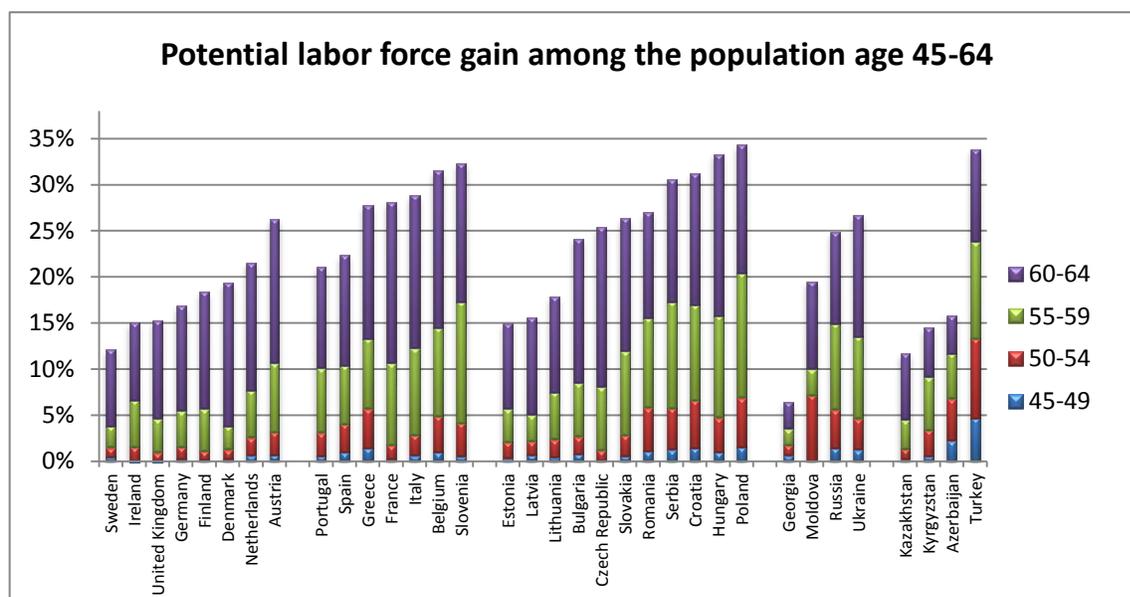
Source: World Bank staff based on Eurostat

63. **Achieving the Europe 2020 employment target in Romania hinges especially on increasing the labor force participation of the population beyond the age of 55, especially of women.** As noted before, low labor force participation is the main factor behind the low employment rates of older workers. Indeed, Romania could expand its labor force by at least 25 percent if older workers reached their participation potential. This is shown in Figure 17 which compares

the potential to increase the labor force in four age groups in Romania and other EU10, taking the participation rate of prime-age adults (age 40 to 44) in each country as the benchmark. By this yardstick, Romania is among the countries which stand to gain the most from increasing the participation of older workers. Given the gender gap in participation profiles, much of these gains would come from drawing more women into the labor force. As discussed later on, the fast aging of the Romanian population implies that keeping the sheer number of older workers in work for longer is also essential to stem the impact of a shrinking labor force. For youth aged 15-24, there is a trade-off between getting them quickly into the work force and supporting them to develop the skills set needed to support longer careers in an increasingly demanding and changing labor market. As shown in the education and skills development section, many of them are already increasingly continuing a tertiary education, but at the same time, many are dropping out too early from school with insufficient skills foundation.

64. **Romania’s employment challenge is compounded by the fact that those who work often hold jobs in the informal sector.** Roughly one in three of those who are employed have an informal job (self-employed or employees not contributing to social security).<sup>22</sup> Informal work is actually more prevalent than formal work among youth and older workers. The compound impact of the “unused work capacity” and non-contributory employment is a pressing social and economic concern, which, as noted in the macro-economic section, puts an enormous strain on the country’s pension system and fiscal accounts.

**Figure 17: Romania could increase its labor force significantly if older workers reached their participation potential. Percent increase in the size of the labor force by age group**



Source: World Bank (2013 forthcoming), based on WDI, data from 2008

Notes: Calculated as the potential increase in the work force if the population age 45-64 had the same participation rate as the 40-44 age group in each country.

<sup>22</sup> Packard, T. et al (2012)

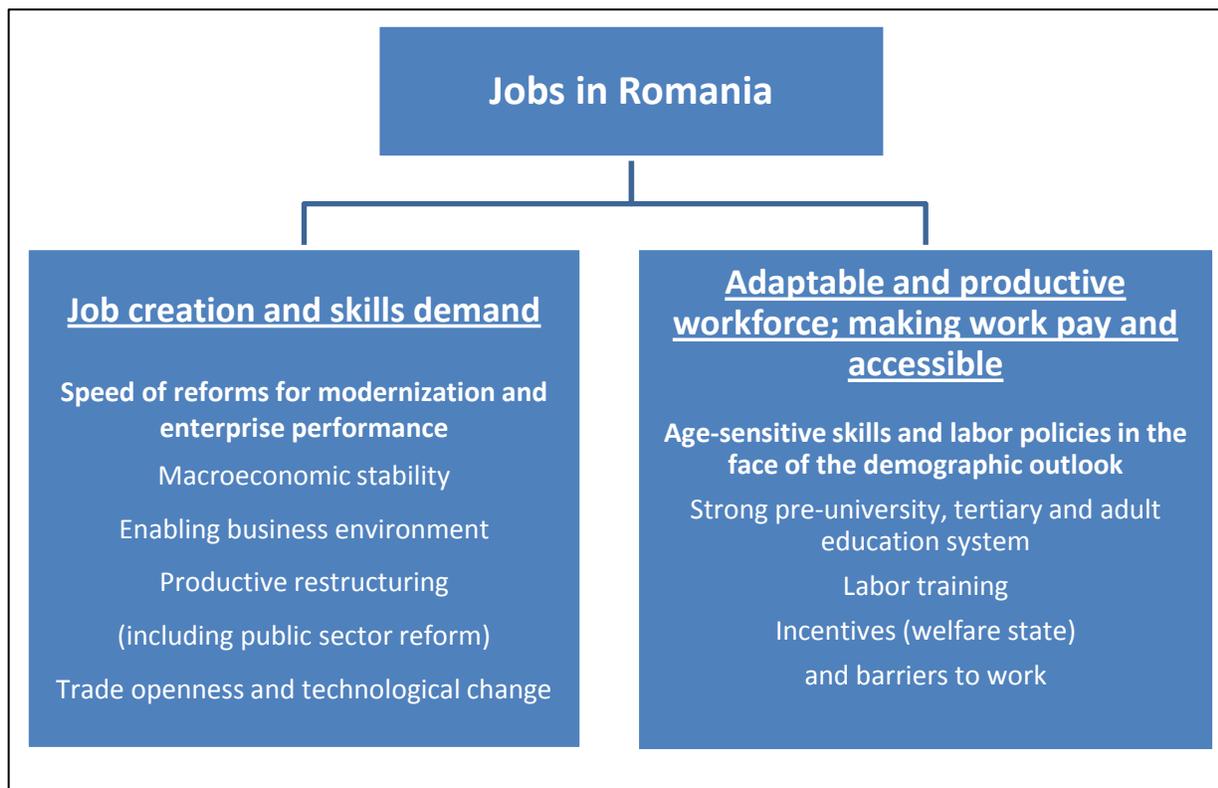
65. In the light of this labor market picture, this section of the report pays special attention to the barriers and possible solutions to expand the share of the older population who stay in work longer. It also examines how to facilitate a smoother transition of youth into formal employment, especially young women. In doing so, it contrasts Romania with its EU10 peers and other transition economies in terms of progress with reforms and policies that affect employment performance overall, particularly job creation, and for these groups in particular. The next section outlines the simple policy framework used to examine the scope for Romania to achieve its Europe 2020 employment target.

## **Determinants of employment prospects in Romania**

66. **Significant global and regional forces have been affecting labor markets in Romania.** The steady shift in value added and employment towards knowledge-intensive activities and services (e.g. finance, hospitality, retail) has continued. Changes in technology, trade patterns, and business practices continue to affect the production and employment structures of most developed and emerging economies in Europe and beyond. Three interrelated forces have impacted labor demand: (i) the spread of information and communication technologies (skill-biased technological change), (ii) changes to more flexible forms of organizational and workplace practices (skill-biased organizational change), and (iii) relocation of all or some of the tasks involved in the production of goods and services to countries with lower unit labor costs (outsourcing or off-shoring). The further integration of Romania with international product and labor markets through accession to the European Union has accelerated internal economic forces through international competition and emigration. These forces could exacerbate labor reallocations as export-led growth gains importance and firms tap into newly developed higher value added and technology intensive activities.
67. **Employment prospects in Romania hinge on further reforms towards economic modernization and development of a more adaptable and productive workforce in the context of fast population aging.** The discussion in this section is built on the premise that labor market performance in Romania depends on the continued pace of reforms towards a market economy and the impacts of its demographic outlook. As argued in a forthcoming World Bank jobs report on Eastern Europe and Central Asia (World Bank 2013b), the relationship between economic growth and employment in EU10 countries since the transition has been largely mediated by the pace of reforms towards a modern market economy. There are important differences across EU10 countries in the pace of reform and economic restructuring. While several countries (like Poland) embarked on a strong path of economic modernization in the early 1990s and had made significant strides by the early 2000s, Romania lagged behind initially and then caught up during the 2000s, especially after the process of EU accession provided strong momentum for faster and comprehensive reform. Still, as noted in the macroeconomic section, important reforms for continued economic restructuring are pending. Meanwhile, changes in the size and composition of the labor force will shape labor market performance as different age groups adapt differently to the productive restructuring arising from reforms and to economic modernization. Twenty years from now, older workers (aged 55-64) will outnumber young workers (ages 15-24) by about 50 percent (reaching nearly 18% of the working-age), and individuals above the age of 55 will be more than double the size of the pool of young workers. This imbalance would be further increased if the recent sizeable emigration of young Romanians continues.

68. **This section argues that by combining policies in two pillars, Romania can achieve its Europe 2020 employment target and go beyond.** Figure 18 encapsulates the most relevant policy factors under the two pillars: in the short and medium term, policy reforms to enable a faster dynamic of job creation by the private sector; in the short to longer term, policies to foster the adaptability and productivity of a shrinking and aging workforce. The latter should address a shift in the demand for skills, an insufficient response from the education and training system, and incentives and barriers to work, all of which affect young and older workers, women and minorities in distinct ways. The Macroeconomic section discussed Romania’s progress and opportunities in the policy reform areas under the first pillar with an economic growth lens. This section examines the implications of reforms for job creation dynamics and skills demand from the lens of the enterprise sector. Under the second pillar, the section focuses on labor policies to encourage work incentives with adequate social protection and accessibility (remove barriers) while the following section examines skills and education policies. This section argues that policy design and priorities in these areas can be most effective when designed with an age lens.

**Figure 18: Determinants of Employment prospects in Romania: Two pillars**



The next section examines the dynamics of job creation in Romania and the extent to which further progress in reform efforts to enable job-creating conditions can improve employment. It discusses the factors that can grow the number of jobs available for all workers in Romania.

## Reforms that enable faster job creation<sup>23</sup>

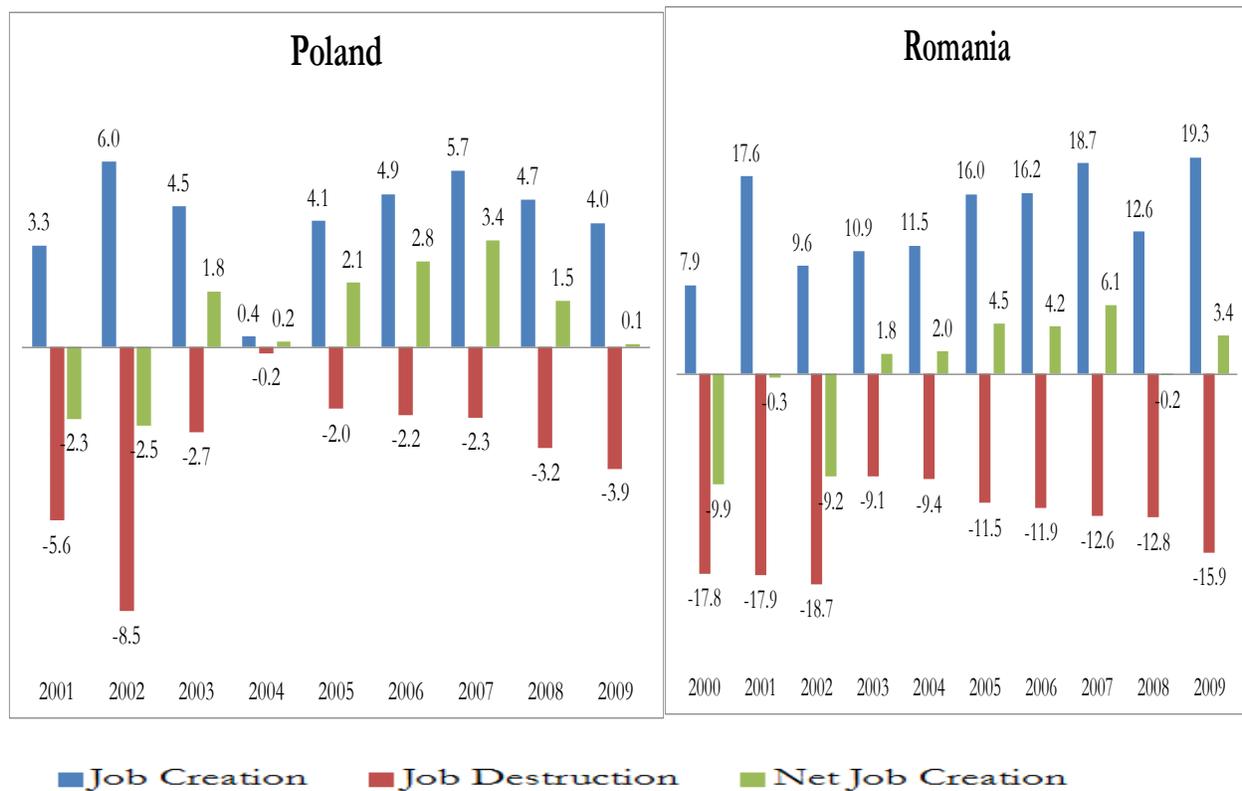
69. **Jobs dynamics are closely linked to enterprise dynamics and restructuring.** With economic restructuring, jobs are both created and destroyed. Job creation occurs as existing firms expand or as new enterprises enter the market. Job destruction results from enterprises downsizing or exiting. In transition economies, job destruction tends to outpace job creation in the early stage of the restructuring process as enterprises shed excess labor and find more efficient production processes. Eventually, as restructured firms find it profitable to expand and/or new businesses enter the market, job creation offsets job destruction and the economy adds new jobs.
70. **It is not the inability to create new jobs that has resulted in flat employment trends in Romania, but the fact that many more jobs were simultaneously being destroyed.** Figure 19 compares the evolution of the rates of job creation and destruction from a national sample of firms in Romania and Poland during the 2000s, drawing on the analysis of the forthcoming World Bank jobs regional report.<sup>24</sup> Romania achieved quite respectable rates of job creation, much higher than Poland, exceeding 10 percent per year and even reaching nearly 20 percent in the midst of the financial crisis. These were, however, outpaced by equally significant job destruction in the early 2000s, when, as discussed in the macroeconomic section, modernization and reforms boosted productivity at the expense of employment. Over time this reversed and net job creation started to emerge during the process of EU accession, but unfortunately this positive trend was halted by the financial crisis. In the case of Poland, it was one of the first countries to go through a period of enterprise restructuring during the transition and as a result the significant job destruction occurred earlier and it continued to outpace job creation well into the early 2000s. Therefore, Romania has been following the experiences of early reformers like Poland and its lackluster employment performance is driven in part by a slower pace of restructuring and reforms.

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<sup>23</sup> This discussion draws from Chapters 1 and 2 of World Bank (2013b).

<sup>24</sup> The estimation of jobs flows is based on continuing firms in the sample of the Amadeus survey of firms covering manufacturing, services and construction in Romania. See World Bank (2013b).

**Figure 19: Romania created many jobs but destroyed even more as the economy restructured – what other early reformers went through two decades ago. % jobs in total employment change, 2000–09**



Source: World Bank (2013b), using Amadeus firm’s database.

71. **Since Romania still requires modernization reforms, to catch up with its EU10 peers, economic restructuring will continue to involve job destruction.** As noted in the macro-economic section, inefficient firms still operate, many of which are state-owned enterprises (SOE) in key sectors such as energy and infrastructure. These impose costs to the competitiveness of the economy. Business environment reforms have also lagged in some areas, particularly with respect to the ease of entry, operation and, when needed, exit of firms. Labor hoarding in agriculture and the public sector comprises more than half of total employment. Resources are thus not reallocated to new economic activities and firms with higher growth potential.
72. **There is evidence that Romania’s pending reforms could help to resume net job creation and achieve its Europe 2020 employment target.** World Bank (2013b) reports findings from an econometric analysis for a sample of transition economies in Europe and Central Asia that yield a correlation between employment creation and reforms that lowered the cost of restructuring (e.g. privatization and enterprise restructuring), leveled the playing field in product markets (e.g. competition) and improved the overall governance structure. In particular, efforts to reform the SOE sector and reduce public sector employment go hand in hand with private employment growth. Results from an accounting decomposition exercise suggest that GDP growth and changes in public sector employment were the two largest contributors to changes in

private sector employment over the period 2000-2010 (Soto 2013). On average, one percentage point reduction in public employment is associated with a 0.53 percentage point increase in private employment. As a result, actual changes in public employment can account for approximately 60% of the observed change in private employment among EU10 countries. Reforms that tackle rigidities and imperfections in the labor and capital markets also correlate positively with labor outcomes, but mostly among countries that had already implemented the previous (so called) first generation reforms. While these results do not establish firm causal relationships, they suggest that as Romania continues to successfully reform the SOE sector it can potentially reap large benefits in terms of both productivity and employment growth over the longer term.

73. **The experience of other EU10 countries suggests that the payoff from sustaining broad reform agendas often materializes with a lag.** In the short-term, in most EU10 countries there was a trade-off between jobs and productivity gains, while in the longer term reforms enable both productivity gains and net employment creation. At the aggregate level, the World Bank (2013b) found that advanced modernizers, countries where job destruction has subsided and job creation is gaining pace, have enjoyed positive productivity and employment growth more often than countries lagging behind in implementing reforms. This difference was more marked in the 2000s than in the 1990s, as the positive benefits of reforms for employment creation were felt more intensely. In fact, Bulgaria, Poland and Romania experienced positive growth both in terms of productivity and employment over the period of 1990s. In the 2000s Bulgaria and Poland grew productivity and employment for 70 to 80% of that that period while Romania grew both by only 40 percent in that time and largely experienced stagnant or falling employment and increased productivity. As a result, the so called employment-to-growth elasticity among other EU10 countries increased over time (World Bank 2013b): one percentage point of GDP growth translated into 0.46 points of employment growth in 2000-2007, compared to 0.13 in 1995-1999, and zero for Romania over the 2000s. In other words, among other EU10 countries, employment growth became more responsive to economic growth only in the 2000s as they reaped the benefit of reforms implemented in the second half of the 1990s and gained access to the EU.
74. **These reforms are particularly important to enable the growth of new firms which contribute the most to net job creation.** Consistent with evidence from advanced economies and other EU10 countries<sup>25</sup>, most new job creation in Romania comes from an incipient small segment of “gazelle” firms (Figure 20). On average, 73 percent of new jobs during 2006-08 were created by just 20 percent of firms in Romania which managed to grow their workforce by 20 percent on average in these years. This pattern is seen in other EU10 countries and transition economies where between 10-15 percent of all firms account for over two-thirds of net job creation. These few firms are typically younger (recently created) but not necessarily small (defined in this case as employing fewer than 50 workers). In Romania, the average age of these high-growth firms during the 2006 to 2008 period is about 5 years compared to 12 years for all other enterprises. In Poland, their average age is 8.4 years while all the other enterprises are 16.4 years old, on average. There is an ongoing debate as to whether the predominant characteristic of these “gazelles” is size or being young (start-ups). The evidence from the US and a few other advanced economies indicates that it is young age more than size that distinguishes these rapid-growth firms.<sup>26</sup> Thus, rather than the conventional emphasis on the role of small business as drivers of new job creation, this underscores the contribution of business start-ups to

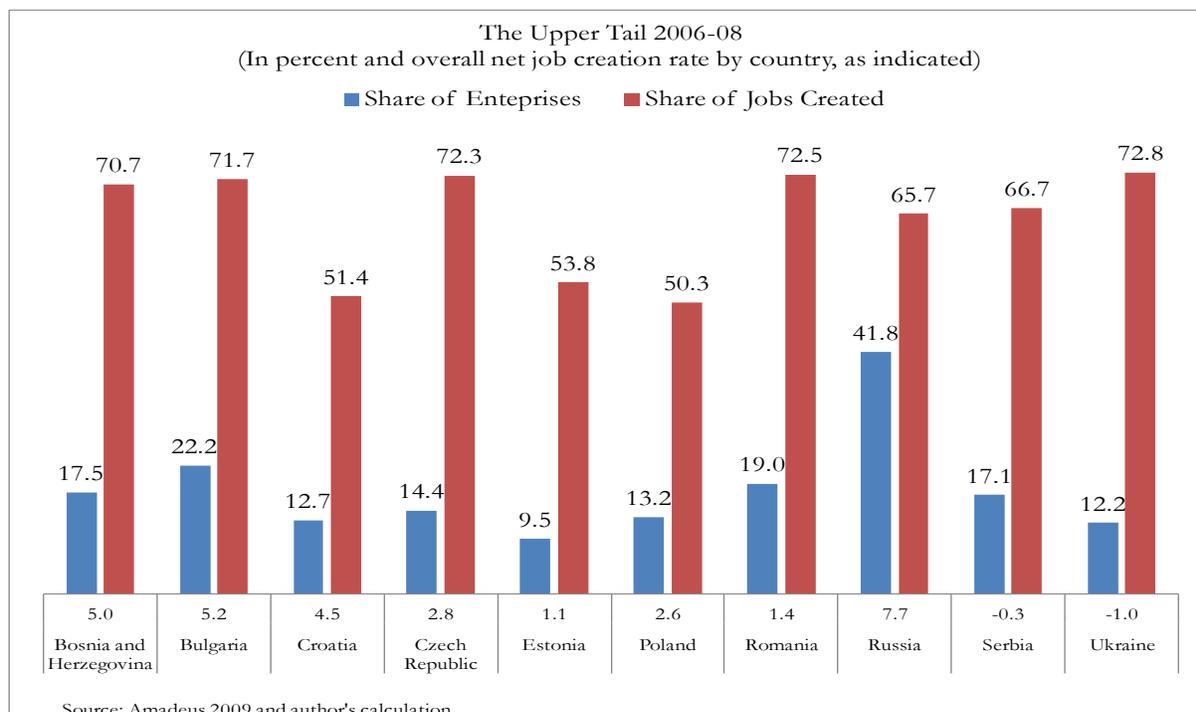
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<sup>25</sup> See Henrekson and Johansson (2010)

<sup>26</sup> See for example Haltiwanger (2012) and Henrekson and Johansson (2010).

employment growth, including the role of firm entry, learning and survival of those with greater business potential.<sup>27</sup>

**Figure 20: Most job creation in Romania is done by a small segment of “gazelle” firms**



Source: World Bank (2013)

Notes: Defined as firms growing at least 20% per year on average during the period.

75. **High-growth firms can emerge in all sectors and not just in high-technology industries.** In Romania, a few sub-sectors of manufacturing (apparel and computer-related industries) led job creation prior to the crisis (Figure 20), as well as construction, which represent an important share of high-growth firms. In other countries, high-growth firms tend to operate in construction, market services, and other manufacturing industries, sectors that tend to be labor-intensive and thus with more potential for employment growth (World Bank 2013b). It is clear, however, that recently established or relatively younger firms have played an important role.
76. **The conditions of an enabling business environment for employment growth are similar for both high-growth firms as well as all other firms.** The World Bank (2013), using the enterprise data shown in Figure 20, undertook econometric analysis in of the determinants of job creation (growth) rates. These indicate that firms confronted with a less burdensome regulatory environment and less corruption experienced faster growth.<sup>28</sup> Greater competition, access to higher quality of infrastructure and judicial efficiency were also associated with better performance in terms of both, growth in employment as well as business profitability. This suggests that there is not necessarily a separate policy agenda to foster the growth of the gazelle

<sup>27</sup> See Haltiwanger, Jarmin and Miranda (2011).

<sup>28</sup> This is based on Udomsaph (2013), background work for World Bank (2013b).

firms and other firms in the economy. The reforms that sustain employment growth across firms in general are the same reforms that boost the performance of the high-growth firms. However, the ability of these firms to grow is particularly sensitive to access to finance and the initial quality of their management practices. Their potential for job creation (direct and indirect) can be enhanced by facilitating the local agglomeration of firms, resources and talent (World Bank (2013b)).

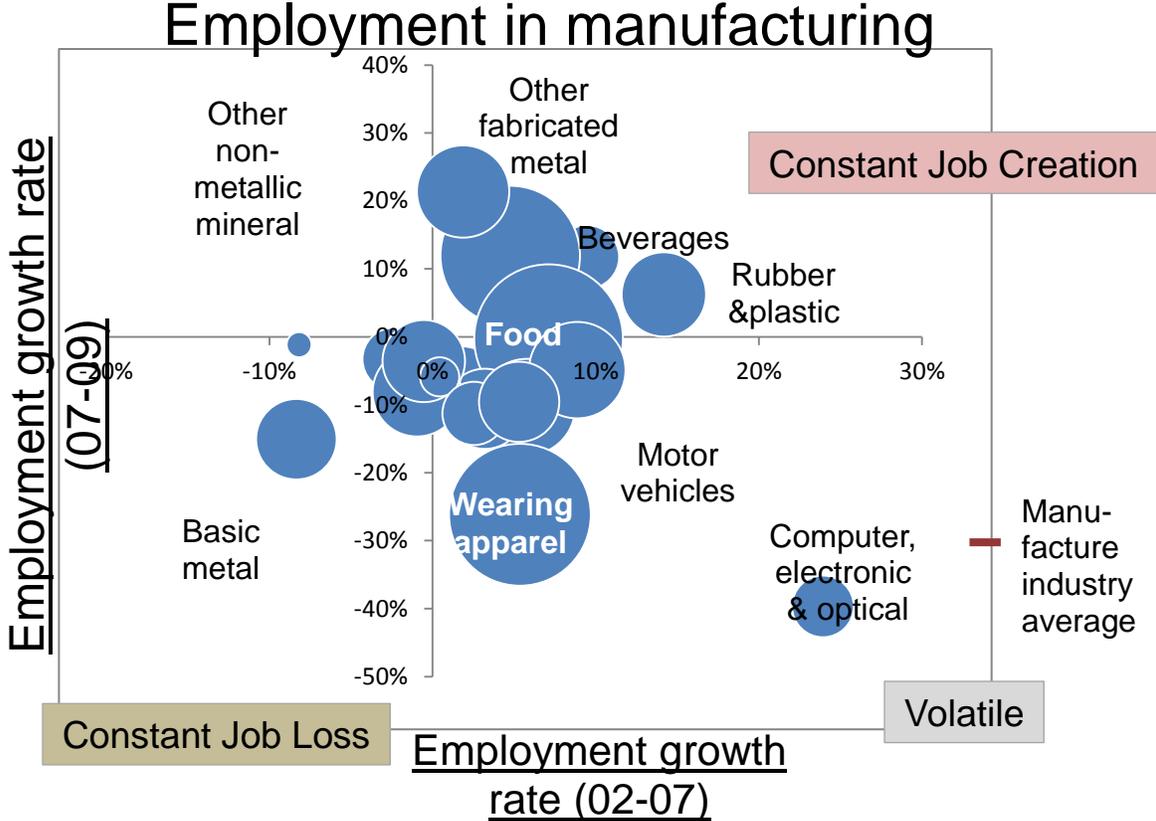
77. **The high-growth firms thrive in an enabling business environment where there are not impediments to productive resource reallocation and firm creation.** World Bank (2013b) finds that the high-growth firms in the sample of EU10 economies appear to thrive in environments where Schumpeterian “creative destruction” reallocates factors of production—labor and capital—toward more productive firms. Over the period 2005 to 2008, high-growth firms start out at a higher level of labor productivity at the beginning of the period, but generally have lower levels of labor and capital. They then experience much faster growth in firm-level labor as well as capital over the subsequent years. An econometric analysis of employment and productivity growth, controlling for firm characteristics, reveals that in Romania, the more productive firms (in terms of total factor productivity gains) tend to expand employment more.<sup>29</sup> These dynamics are fully consistent with a reallocation process where an economy is moving resources from less productive and less profitable firms to more productive and more profitable firms. This has proceeded at a slower pace in countries like Romania than in other EU10 countries, again consistent with lagging diversification (out of agriculture/public employment) hindering job creation.
78. **As in other countries in the region, younger and smaller firms in Romania were particularly affected during the global financial crisis.** The results of a World Bank Financial Crisis Survey (FCS), a longitudinal survey that tracked manufacturing and service sector firms through 2010<sup>30</sup>, show that new and small firms fueled much of the region’s job creation during the boom years, but were also less likely to survive during the crisis. The results of an econometric analysis of these survey data suggest that the smallest firms were 63 percent more likely to fail than larger firms. Younger firms were also more likely to fail. Their more limited access to finance appears to have been a factor. In addition, non-exporting firms and domestic firms were more likely to cut jobs. In Romania’s manufacturing sector, the sub-sectors leading job creation prior to the crisis (apparel and computer-related industries) also experienced larger contractions in employment during the crisis according to data from the Amadeus database.

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<sup>29</sup> See World Bank (2013b).

<sup>30</sup> Countries included in this survey are Bulgaria, Hungary, Latvia, Lithuania, Romania and Turkey.

**Figure 21: Food industry led in size and was less vulnerable to the shock. Apparel, and Computer-related industries, which had created jobs, cut jobs drastically after the crisis**

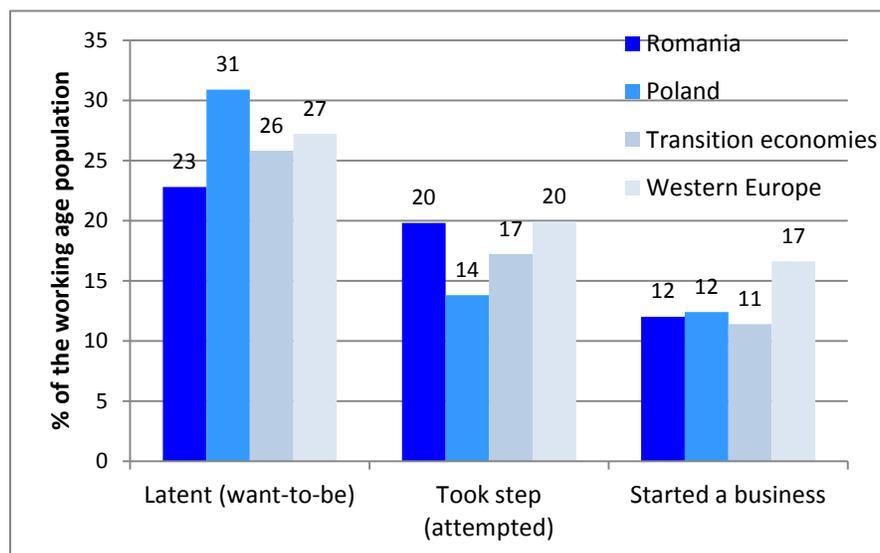


Source: Based on World Bank “Buddy Tool” with Amadeus data.

79. **A healthy rate of business start-ups is key to expanding and sustaining a modern private enterprise sector, but rates of entrepreneurship in Romania are below potential.** Since young (new) firms tend to account for the bulk of new jobs this raises the question of whether barriers to entrepreneurship are hindering the potential for job creation in Romania. Data from a recent EBRD-World Bank Life in Transition Survey analyzed in World Bank (2013b) provides evidence that the pool of potential entrepreneurs and of successful business starters (as a percentage of the working-age population) is far below comparators in Western Europe and even other transition economies. As shown in Figure 22, the pool of workers who declare they want to be self-employed among those in the labor force is much lower in Romania (23 percent) than in other transition and Western European economies. Romania fares well in terms of workers who took steps to start a business, but again lags behind on those that actually managed to do so. Of those who attempted to start a business in Romania, nearly two-thirds did manage to do so. While this is a sizable rate of “successful” business start-ups, it is way below the rate of attempts in Western Europe (84 percent) and countries like Poland (89 percent). As a result, the actual rate of self-employment and new entrepreneurs is lower in Romania than in other emerging economies, similar to other transition economies.

80. This raises the question: why is entrepreneurship potential so subdued in Romania? **Both latent entrepreneurship and the likelihood of succeeding in starting a business (conditional on being a latent entrepreneur) are associated with certain demographic and attitudinal characteristics, as well as with the quality of a country’s business climate.** The relatively low rates of entrepreneurship potential and business startups of Romania are actually a common pattern observed in transition economies since the beginning of the transition period.<sup>31</sup> As discussed in World Bank (2013b), several explanatory factors have been put forward, chiefly institutional and attitudinal explanations related to the legacy of central planning, undeveloped market-driven business attitudes, and an unfavorable business environment. In particular, studies have found a correlation with the lower levels of trust in institutions, confidence and autonomy in contrast to more developed market economies, traits related to risk-taking preferences, entrepreneurship drives, and the development of networks and the provision of entrepreneurial finance.<sup>32</sup>

**Figure 22: Romania’s pool of potential entrepreneurship is low. Percent of the working age population by each age group, 2010**



Source: World Bank staff based on LITs 2010

Note: Simple average for transition economies and Western European countries covered in the LITs.

81. The analysis of the Life in Transition Surveys (LITs) 2010 data for transition economies reported in World Bank (2013b) suggests that individual demographic and socio-economic characteristics as well as the country’s business environment correlate with higher rates of latent entrepreneurship. Older, married males and individuals willing to take risks are more likely to be latent entrepreneurs. A person who is at the top of a self-reported 1 to 10 risk scale is around

<sup>31</sup> See for example Aidis, Estrin and Mickiewicz (2008), Estrin and Mickiewicz (2010), Estrin, Meyer, and Bychkova (2006) and Ireland et al (2008). The literature on new firm creation in the ECA region is fairly recent. See for example Meyer and Peng (2005).

<sup>32</sup> See, for example, the earlier study by Blanchflower, Oswald and Stutzer (2001) using EU data and including some new EU member countries, Aidis, Estrin and Mickiewicz (2008), Estrin and Mickiewicz (2010), Estrin, Meyer, and Bychkova (2006).

16% more likely to be a latent entrepreneur compared to a person who falls at the bottom. While educational attainment is not consistently related with latent entrepreneurship, it is positively correlated with the odds of starting a business and succeeding, among those who are latent entrepreneurs. Noteworthy, working in the private sector is associated with higher latent entrepreneurship rates, which is consistent with private employees having a higher value and exposure to business-drives in private compared to state enterprises. The ease of doing business is positively related to latent entrepreneurship. In particular, the number of procedures required starting a business, higher investor protection, and higher rates of resolved insolvency in a country are all positively associated with latent entrepreneurship rates. Thus, when pondering whether or not to become an entrepreneur individuals already factor in the likelihood of success as well as the costs, not just of creating a new business, but also of eventually shutting it down if it does not succeed. As noted in macroeconomic section, this is an area – bankruptcy and insolvency regulations – where Romania is lagging behind. Latent entrepreneurship is also higher in areas with higher concentrations of economic activity, measured as the incidence of self-employment at the regional level. This points to the importance of conditions that enable the relocation of productive factors to enable agglomeration economies.

## **Policy options for Romania**

82. **The previous findings suggest a key role for public policy in strengthening the job creation pillar for Romania to achieve its Europe 2020 employment target.** There is a common policy agenda of reforms to promote the restructuring of the enterprise sector both to improve the operation of existing enterprises and to foster new business startups and entrepreneurship. As discussed in the macro-economic section, Romania's efforts to continue with its bold reform of the SOE sector – and particularly in energy and infrastructure – and to modernize its public administration are essential. Moreover, business climate reforms that lower the cost of starting and closing a business, including regulations on business registration, insolvency and bankruptcy procedures, can allow existing and new businesses with high potential to thrive and create jobs and others to “fail fast, fail cheap”. The experience of other EU10 countries like the Baltics and Poland that have achieved significant improvement in some of these areas could offer useful guidance on success factors. Similarly, policies that facilitate and promote economic agglomeration and increase business density such as better infrastructure connectivity and development of supply chains are also essential for promoting the relocation of resources to more productive uses and eventually faster job creation.
83. Finally, actions are needed to selectively promote entrepreneurship through tested or promising interventions to support new and prospective entrepreneurs to launch new businesses. For instance, programs to provide prospective entrepreneurs with business training, individualized consulting, competitive grants for seed-capital and prudent access to finance. Recent studies have documented big differences in the quality of management across firms and countries and have linked these to differences in firm performance.<sup>33</sup> Some recent field experiments offer new evidence that entrepreneurship can be supported through training in the adoption of better management practices. For example, a program of consulting advice on management practice provided to randomly selected manufacturing firms in India was found to boost productivity by up to 17 percent.<sup>34</sup> The study found that lack of information and inertia in the use of current practices account for the lack of adoption of more efficient management practices. This is

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<sup>33</sup> Bloom. and Van Reenen (2007)

<sup>34</sup> Bloom et al (2013)

consistent with a role for policy to address these constraints. In fact, the study found important spillover benefits among other establishments that were not directly part of the field experiment but the new business practices spread and as a result other firms also experienced productivity gains. Other programs of basic business training and advice have been shown to impact the performance of micro- and small enterprises.

84. Evaluations of a few recent programs that deliberately target the development of aspirations or entrepreneurial attitudes show that it is possible to shift behavioral skills associated to risk-taking and tolerance of failure and this can prove effective in increasing the number of entrepreneurs and fostering the creation of new businesses.<sup>35</sup> For instance, Romania can promote greater participation of their youth in the "Erasmus for Young Entrepreneurs" program, combined with other interventions that help these youth have a better chance to turning business ideas into successful new enterprises. In light of the mixed evidence with these programs, it is advisable to pilot and evaluate interventions to assess their impact and as well as assessing whether and how they might be scaled up. Several countries, for example, Britain, New Zealand, and Singapore are providing special visas to entrepreneurs and investors in order to more strategically tap into international talent and capital to spur local entrepreneurship. Some countries are testing ambitious programs, for example, Start-Up Chile which aims to tap into both international and national entrepreneur talent by granting promising young firms, selected on a competitive basis, a small seed capital grant and a year's visa to develop their business ideas in Chile. Since its inception in 2010, more than 500 companies and almost 900 entrepreneurs from nearly 40 countries have participated and the program is already helping raise Chile's profile abroad as a hub for enterprise and inspire homegrown entrepreneurs.
85. Provided the conditions exist for business to create jobs, workers need to be prepared and adaptable to tap into newly created job opportunities. Most importantly, they must have the skills that jobs require. Next, we examine the implications of changes in employment patterns for the demand for skills in Romania, which together with the discussion in the evidence based policy making section can be informative about the significance of skills gaps and mismatches as a constraint to employment of specific population groups.

### **Skills Wanted: A higher demand for skills**

86. **Global and regional forces affecting labor markets require more adaptable workers.** Trade, technological and organizational change have led to a growing demand for "new economy" (higher-order) skills – that cannot be easily automated – and a decline in more routine "manual" skills. In Romania, the significant structural productive transformations, with job creation and destruction, and the further integration of international markets (e.g., accession of the new member states to the European Union) are likely to affect the demand for skills. The response of the education and training systems to these trends determines the extent to which they have led to mismatches in the supply and demand of skills.
87. **There is evidence that shifts in the demand for skills can hinder labor performance of both youth and older workers in Romania, though their significance is not yet as strong as in other EU10 countries.** There are three main reasons for this. First, when asked, employers in Romania say that skills are amongst their top business concerns. Second, in most EU10 countries – especially the more advanced reformers – jobs are increasingly requiring modern workplace

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<sup>35</sup> McKenzie and Woodruff (2012)

skills, a trend that will eventually be manifested in Romania. Third, as further discussed in the evidence based policy section, the education and training systems have not adequately kept up with the pace of changes in skills demand.

88. **In the eve of the financial crisis, enterprises in Romania reported that finding workers with the skills they needed had become one of the top constraints to their business growth.** There was a substantial increase in the share of firms reporting that finding workers with adequate skills was a major or very severe constraint to their business from the mid to late 2000s (Figure 23). More than four out of 10 firms in Romania reported skills as a major or very severe constraint. The increase was stronger after the country became integrated to the EU markets and began experiencing rapid emigration.
89. **When Romanian employers complain that workers do not have the right skills, they are not just reflecting on education credentials or technical qualifications.** More than ever workers are matched to jobs based on a multiplicity of skills not just their educational qualifications. Employers value both generic and technical skills. The former comprise cognitive (e.g., literacy, numeracy, problem-solving) and socio-emotional (e.g., self-discipline, perseverance, dependability, teamwork) skills, also called “soft” or “non-cognitive”. Technical skills refer to vocational and career qualifications and job-specific skills. There is mounting evidence that employers in advanced and emerging economies see the lack of socio-emotional (soft) skills at least as binding as cognitive and technical skills.<sup>36</sup> This was also strongly noted in focus groups discussions with employers in Romania conducted as background for this study. Similar evidence from employer surveys in OECD countries and other middle income economies point to the importance of generic cognitive and socio-emotional skills aside from technical skills in firms’ hiring decisions.<sup>37</sup> Several studies using new labor force data that include measures of these skills have found that they are rewarded as much as cognitive skills by labor markets in the US, Europe and other emerging economies.<sup>38</sup> In many of these countries there has been a dramatic rise in the number of jobs in occupations that are more intensive in higher-order analytical and organizational skills (non-routine cognitive and interpersonal skills), dubbed “new economy skills”, and a sharp decline of those jobs associated with repetitive and manual tasks.

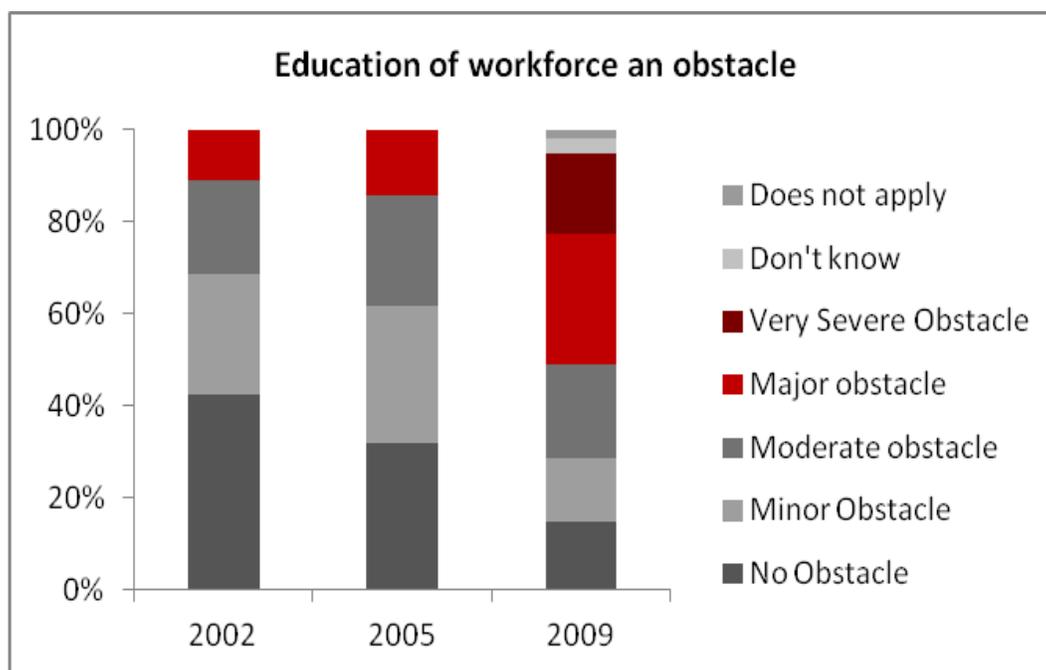
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<sup>36</sup> This is reflected in recent employer surveys in countries like Bulgaria, Georgia, Kazakhstan, Poland, Macedonia, Russia and Ukraine which delve more deeply into which skills are scarce or most valued. See references in World Bank (2013b).

<sup>37</sup> See for example the recent Falsh Eurobarometer (2010) report;, Gallup, Bowles and Gintis (1998) for evidence of employer surveys from the United States and United Kingdom; Blom and Saeki (2010) for a study for India; and World Bank (2012) for evidence from Latin America.

<sup>38</sup> See Borghans, Duckworth, Heckman, and ter Weel (2008) for a literature review; Brunello and Schlotter (2011) for Europe; Heckman, Stixrud and Urzua (2006) for the US, and World Bank (2012) for Latin America.

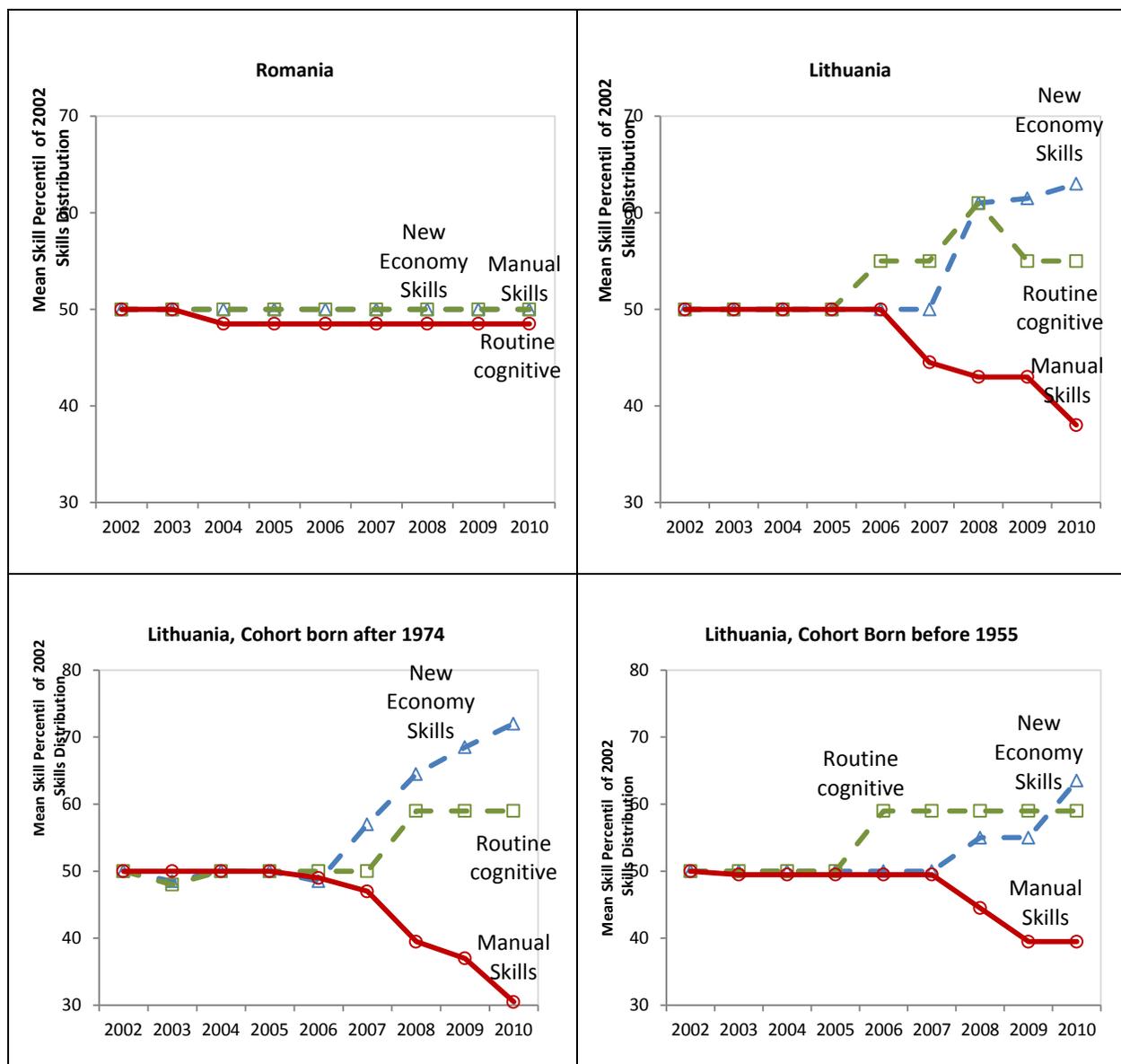
**Figure 23: More Romanian employers assert that skills are a binding constraint to their business. Distribution of firms that consider skills as a major or very severe constraint (2008)**



Source: World Bank (2012)

90. **In other EU10 economies, the demand for “new economy” skills increased and fell for manual skills, but this has not yet transpired in Romania.** This is illustrated in Figure 24 comparing trends in Romania and Lithuania, drawing from the analysis in World Bank (2013b). The latter shows a substantial expansion in the higher-order skills content of employment after EU accession. This is likely to be reflecting the country’s gradual but consistent shift towards a knowledge-based economy with special emphasis on biotechnology. At the same time, there is sluggish or falling demand for manual skills that can be easily automated or off-shored. Similar trends are observed in other EU10 economies, particularly among the early (fast) reformers and more integrated with external markets, particularly to the EU, and with a more skilled workforce. These countries are said to have had relatively better performing education systems before the transition. In contrast, Romania has not yet experienced significant changes in the skills intensity of jobs since EU accession. This suggests that the process of job reallocation had not significantly changed the overall skills content of employment and that the persisting labor hoarding in traditional sectors (agriculture, public sector) has held constant the demand for jobs involving repetitive and manual tasks. A question that warrants further study is how much these differential outcomes reflect the intrinsic demand characteristics of the Romanian economy and how much they reflect supply constraints in the labor force related to emigration (with investment decisions adapting to the available skills in the labor force).

**Figure 24: Skills of older cohorts are at risk of obsolescence in Romania as in other EU10**



Source: World Bank (2013b), based on labor surveys

Note: The y-axis plots the percentile of each skill distribution for each year and cohort with respect to the respective median in the initial year. See World Bank (2013b) for methodology.

91. **The demand for new skills is stronger or in some cases only evident among younger cohorts in other EU10 countries.** As shown in Figure 24, the trends have a distinctive age-cohort pattern: the shift towards higher intensity in “new economy” and routine cognitive skills is stronger for jobs held by younger cohorts while job-intensity in manual skills falls or is flat for jobs held by older cohorts (and to a lesser extent youth). The older cohort experiences only a modest increase in employment with a high intensity in new economy skills. Other EU10 countries actually show a flat trend (World Bank (2013)). Thus, older workers have not benefitted as much from the expansion of jobs that require higher-order skills and are losing out as jobs requiring traditional skills disappear. Skills of many older workers are at higher risk of

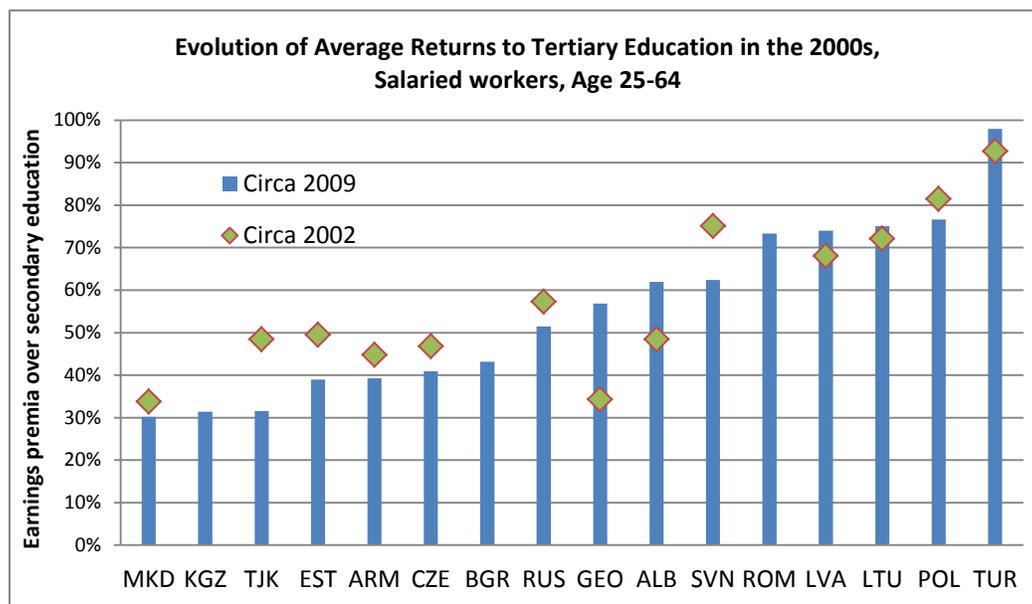
being rendered obsolete by demand trends. As Romania embarks in its pending reforms agenda, it is likely to experience age-differentiated changes in skills demand experienced by early reformers. Naturally, these trends will impact the labor market prospects of older workers as well as those currently in their 30s and 40s over the next couple of decades. This could possibly leave some older workers short-changed as they are at higher risk of skills obsolescence, and are less likely to migrate. As discussed below, this can be addressed through smarter active labor market policies, including age-sensitive training.

92. **As discussed in the following section, the response of the education system to employers' demands and global trends has been uneven.** On the positive side, tertiary education coverage in Romania has expanded rapidly among youth, although with varying quality and relevance. This has led to a concern around an alleged "overexpansion" by which the supply of tertiary educated workers is said to outpace the demand in the labor market, producing graduates whose skills are not in line with what employers need. This concern has been voiced in other EU10 economies. Thus, it is said that many graduates end up taking jobs that require lower qualifications and skills. A similar concern arose in the late 1970s in the US when a surge in college graduates from the so called "baby boom" generation apparently resulted in a substantial reduction in the returns to college. Subsequent analyses of the data proved that concern to be unfounded.<sup>39</sup> In order to assess whether the concern is justified in Romania, World Bank (2013b) analyzed the evolution of the returns to tertiary education in several transition economies. Figure 25 compares the average return in Romania with other transition economies to infer whether there are indeed gaps in the relative supply and demand for embedded skills.
93. **Concerns with an 'over-supply' or 'over-qualification' of university graduates in Romania seem misplaced.** There is little evidence that an overexpansion of tertiary is driving down returns to college overall. Although the lack of required labor force micro data for the early 2000s prevents an assessment of trends, as shown in Figure 25, the average earnings premium for tertiary education at the end of this decade was generally as high as in other well-performing EU10 economies. It is not clear, however, to what extent the high tertiary returns partly obtain from the slack caused in the labor market by the sizeable emigration of Romanians, many of whom are increasingly well-educated (Box 1). Also, the crisis may have affected the returns, although this depends on how it has impacted employment opportunities and earnings of the college-educated relative to those of high school graduates.

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<sup>39</sup> At the center of this debate was Richard Freeman's book "The Overeducated American" published in 1976. See Berg (1970); Freeman (1975), (1976). Smith and Welch (1978).

**Figure 25: Tertiary education - high average returns in Romania compared to other ECA countries**



Source: World Bank (2013b), based on Labor Force and Households Surveys, latest years available.

94. However, **evidence from other EU10 countries that have experienced a similar rapid expansion of tertiary education warns that not all individuals may benefit the same way from a tertiary education.** The returns in Figure 25 are averages and as such can mask important variation in the performance of tertiary graduates. Indeed, novel findings for Bulgaria and Poland reported in World Bank (2013b) show that the average returns to tertiary education are not available to everyone alike. In Poland, young men who were more likely to be induced to enroll by the expansion in the number of universities enjoy a college-wage premium two times higher than young women and that young men who were less likely to be affected by the expansion (likely from less well-off families). In Bulgaria, college can be a risky investment. It can be lucrative for graduates who land jobs at higher salaries in their field but very unattractive for those graduates that end up with low salaries, even resulting in negative returns when direct costs of college (e.g., tuition fees) are factored in. This variation in returns can deem the pursuit of a tertiary degree a bad proposition for a non-negligible group of youth, even if it constitutes a value investment for most youth.
95. **An important policy area is to provide individuals and families with timely and relevant information on market returns for various career paths and on the characteristics of the supply of programs with some minimum quality assurance.** As discussed in the education and skills development section, without these and other reforms to strengthen the supply of tertiary education, mismatches from post-secondary education are likely to become as pressing in Romania as they are in more advanced reform economies that are closer to the technological frontier and in light of its fast-aging and projected workforce decline.

### **Box 1: The profile of emigrants and the Romanian Diaspora.**

Evidence from a recent survey of Romanian migrants provides insights on the evolving profile of this population in recent years. The typical international migrant is young or prime aged, better educated, equally likely to be male or female, and leaves the home country in search of better economic opportunities. Women account for almost half of the migrant population. Migration patterns have changed in recent years. Romanians who went abroad around the year 2000 tended to be less skilled and sought work in the booming Spanish construction sector or healthcare sector in Italy. Since 2005, migrants were younger and more likely to have tertiary education than the average Romanian, and relied less on networks in their destination. They went to different host countries in Northern Europe and the non-European Anglophone world, often found employment in the formal service sector, including banking and finance, and were able to advance their careers upon migration.

Despite downward professional mobility, most Romanian emigrants do better in labor markets abroad. When starting employment in another country, migrants often take a step down in their careers, switch sectors or accept jobs that make little use of previously acquired skills. For example, typical cases are nurses who work in old-age homes or skilled mechanics who become unskilled laborers in the construction sector in Western Europe; about 35 percent of former agricultural workers move into construction, 15 percent into manufacturing and 14 percent to domestic work. In other sectors, workers are better able to put the skills learned at home to use: in construction, a sector that absorbs over a quarter of all migrants from Romania, more than two thirds of workers remain in the sector after migration. Yet, migration does pay off as they still earned higher incomes abroad.

Given the prospects for these trends continuing, Romania can benefit from policies strengthening the links between the Diaspora and the local economy and creating incentives for migrants to return and invest productively at home. For instance, by creating incentives for gearing remittances towards productive investments and facilitating the transition of those workers who want to, for example, making it easier to maintain social benefits, buy property and start a business.

*Source:* World Bank, 2013b

96. The next section discusses the evidence for whether weak work incentives in Romania, arising from the tax and social benefits system, lead to fewer people working or searching for work. It also considers the barriers that lead women, youth, older workers and Roma to have lower labor market attachment.

### **Work incentives and accessibility in Romania<sup>40</sup>**

97. In addition to being prepared to take on newly created job opportunities, workers must have the incentives to seek work and be able to access jobs that best fit their skills. Market institutions, tax and social protection systems and the overall rules and norms that govern employment in

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<sup>40</sup> The discussion draws on Chapter 4 of World Bank (2013b).

Romania and most transition countries have been mainly designed with prime-age male workers in mind. This raises two main questions: Does the tax and benefits system in Romania undermine work incentives? Are there specific barriers to employment affecting some groups, particularly youth, older workers, women, and Roma?

### *Improving work incentives*

98. The design of tax and social protection benefits should provide incentives and support for: (i) moving out of inactivity or unemployment to take on a formal job, for the working-age population at all ages; (ii) opting for formal rather than informal employment, for those already in the labor force; and (iii) older workers staying in employment longer. In the first two cases, disincentives can arise from the design of tax and social benefits that do not make work pay for both the employee and the employer. In the latter case, they largely arise from the pension system design. Recent findings from behavioral economics are also shedding new light on how contextual factors (including norms and institutions) and individual cognitive and non-cognitive traits affect the responses to incentives and attitudes to participation in pension schemes. Finally, labor market regulations and institutions, like employment protection legislation or seniority wages, can create disincentives for firms to hire workers, but at the same time can also provide protection against discrimination of disadvantaged groups. These issues are discussed in turn.
99. **There is evidence that the tax and social benefits system and labor regulations in Romania do not always make work pay or accessible, especially for groups with looser labor market attachments.** As in many countries across Europe, labor taxes and elements of the design of the social protection system in Romania create disincentives to employment. This is captured by the so called “tax wedge”, computed by the OECD, which captures the income forgone by a combination of income labor taxes and lost benefits when taking on a formal job. For instance, if a person starts to work formally, even if only for one hour per week, some social assistance benefits are fully withdrawn. This is currently the case with the Guaranteed Minimum Income program in Romania, and customary for unemployment benefits. In addition, barriers and provisions in labor regulations do not make labor markets contestable for women, young and older workers, and ethnic minorities. They inadvertently exclude or discourage many from work. The latter groups face a “twin-problem”: disincentives to work (from labor taxes and social protection systems) and barriers to employment.
100. **Labor taxes in Romania affect low-wage earners disproportionately, being less progressive than in Western European and other OECD countries.** The tax wedge in Romania increases with wages but less sharply than in Western Europe (World Bank 2013b). On the contrary, a number of countries, such as Bulgaria and Montenegro, have flat labor income tax rates that tax any additional euro earned from work at the same rate regardless of the level of earnings. Less progressive labor taxation rates are particularly harmful for young and older workers, as well as women and ethnic minorities, who tend to have a more sensitive (elastic) labor supply.
101. **Social assistance recipients are discouraged from moving out of labor inactivity by significant foregone tax and social benefits, especially for low-wage and part-time earners.** This so-called “inactivity-trap” is illustrated in Figure 26 (Panel A) for archetypical average and low wage earners. In Romania a typical average wage earner is taxed about 40 percent of his labor income through a combination of labor taxes and lost benefits. While less severe than in OECD and other countries in Europe, formal work disincentives are still significant, especially for low-wage earners, part-time workers and second-earners on social assistance. Implicit tax

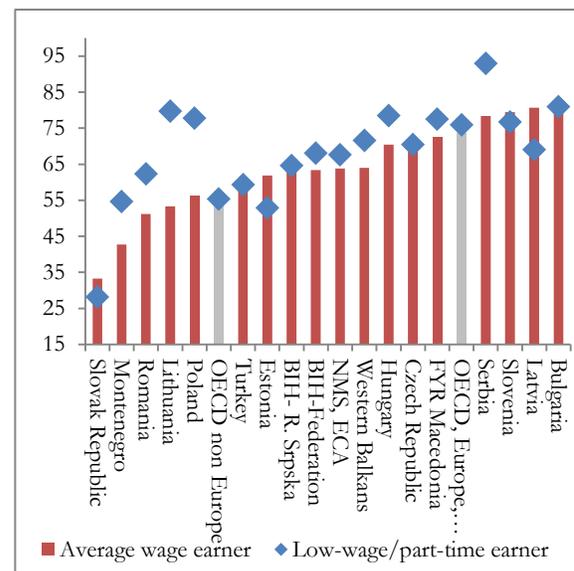
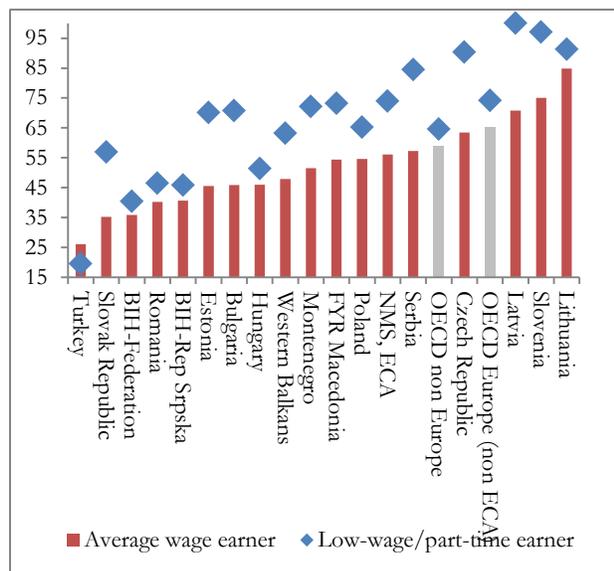
rates are significantly higher for workers earning only half the average wage compared to those earning higher wages. The “inactivity trap” is five percentage points higher for second-earners in the household.

102. **Leaving unemployment to take on a formal job is even more strongly discouraged by ill-designed tax and benefits, especially for low-wage and part-time earners.** Even if unemployment benefits overall are not very generous, they are often abruptly withdrawn when people start to work formally. In Romania, on average, around half of labor income for average wage earners is taken away when shifting from unemployment benefits to formal employment (Figure 26, panel B). Again, while this “unemployment trap” is less significant than in other European and OECD countries, like the inactivity trap, work disincentives are especially high for low-wage (climbing up to 65 percent) and part-time earners, particularly among prime-age workers whose work histories make them eligible for unemployment benefits. The implicit tax rate for unemployment benefit recipients is also higher for second-earners.

**Figure 26: The costs of taking a formal job could be high in Romania, especially for low-wage earners and part-time workers. (% of gross labor income), 2010**

Panel A: “inactivity trap”, average effective tax rate

Panel B: “unemployment trap”, average effective tax rate



Source: World Bank (2013b), based on OECD Tax and Benefit Model.

103. **There can be also disincentives for older workers to stay longer in the workforce stemming from the pension system itself.** Clearly, the level of pension benefits and the ensuing social security contributions alter incentives for formal employment and impact labor and economy wide productivity.<sup>41</sup> In the case of pensions, early retirement cuts the working lives of older

<sup>41</sup> Indeed, prominent authors warn that tax distortions that result from the financing needs of old-age pensions are going to be the main channel through which aging will affect economic output. See Weil. (2006).

workers short by a substantial amount. The most recent developments in the pension law set the retirement age at 65 for men (from 64) by 2015 and 63 years for women (from 59), by 2030. Romania is one of only two EU countries that maintain gender differentiated retirement ages. With improvements in life expectancy, the duration of retirement has increased for the elderly. On average, a typical person in Romania today, if retired at the statutory age, lives at least 10 years as a pensioner.

104. **The disincentive effects for the labor supply of older people are well documented for many industrialized countries.** For instance, in their comprehensive study including nine Western European economies, Gruber and Wise (2005) found that pension benefit rules - and the resulting “implicit tax on continued work” - are a crucial determinant to the timing of retirement across several countries.<sup>42</sup> They estimate that a reform that increases the pension age by three years would likely reduce the proportion of inactive men aged 56 to 65 by up to 36 percent.<sup>43</sup> Likewise, high contributions, and a perceived uncertainty about eventual retirement benefits, can erode individual’s incentives to work or, more precisely, to contribute to the pensions system.
105. **There is some evidence that pension systems may be behind the lower employment rates of older workers in transition economies.** As noted in a forthcoming World Bank regional report on pensions (World Bank 2013c), data availability has precluded the study of labor supply and retirement effects of pension systems in emerging economies, including Romania.<sup>44</sup> An exception for another transition economy is a recent study by Danzer (2010) which uses a natural experiment from Ukraine to estimate the causal effect of a threefold increase in the legal minimum pension on labor supply and retirement behavior at older ages. Applying difference-in-difference and regression discontinuity methods on two independent nationally representative data sets, he finds that higher pension incomes have strong disincentive effects on the labor supply decision of older individuals. The income effect from the new pension policy leads to a 37-47 percent increase in retirement at the statutory retirement age for men—and to a 30-39 percent increase for women. Those women who remain in the workforce reduce their yearly working hours by 15 percent, while men have no significant response. The estimated effects are much stronger for less educated workers. He concluded that the substantial pension increase provided strong disincentives to work and put a heavy fiscal burden on Ukraine, although it had positive impacts on averting old-age poverty. In light of the fact that Romania’s pension system is equally if not more generous than Western Europe’s, it is quite plausible that it plays a significant role in the low labor force participation of older workers.

### *Policy options for Romania*

106. **The key is to address work disincentives for low-wage earners who tend to have a more elastic labor supply.** Many today work in informal jobs or in casual part-time jobs intended to supplement household income earned from either pensions or by the main bread winner of the family. These types of jobs more often than not pay enough when done in the formal sector. World Bank (2013b), suggests that there are two main avenues to change work disincentives: (i)

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<sup>42</sup> Gruber and Wise (1999) and Gruber and Wise (2005).

<sup>43</sup> Idem.

<sup>44</sup> Although a number of emerging countries have successfully carried out several reforms, including introduction of non-contributory pensions with broad coverage (Willmore, 2007; Barr and Diamond, 2008), empirical research has been constrained by lack of long time series or natural experiments data that may allow isolation of causal effects. A study by de Carvalho Filho (2008) found that changes in pension eligibility rules and doubling in minimum benefits for rural workers in Brazil reduced male labor supply by roughly 38 percentage points.

better design of social benefits such as social assistance, unemployment and family and housing benefits in a way that rewards formal work; and (ii) lower labor taxation, with a focus on low-wage earners. The former entails reforms that make formal work pay and allow for a phased withdrawal of benefits as work income increases. That is, not every dollar earned formally should be subtracted from benefits one-to-one or lead to a complete withdrawal of benefits. The latter entails shifting taxation away from labor to others types of income, consumption, or property and assets. Given that labor taxation is fairly non-progressive in Romania, targeting labor tax reductions to low-wage earners is likely to be more effective than across-the-board tax reductions.<sup>45</sup> This could be done through tax credits or so-called in-work benefits that grant tax breaks conditional on having a job, like the US Earned Income Tax credit. Reforms should be fiscally neutral and take into account equity and efficiency impacts.

**107. There are reforms in Europe already underway from which Romania can draw positive lessons.** In Slovakia, between 2001 and 2010 the implicit tax rate for those on social assistance fell by 52 percentage points (to 43 percent) if moving from inactivity to formal work and by 48 percentage points when moving out of unemployment benefits. In Hungary and the Czech Republic, the inactivity tax rate fell by 10 percentage points in the same period and, critically, fell significantly more (33 percentage points) for low-wage earners. Some countries introduced reforms to limit benefits or reduce their generosity over time. In Macedonia, for instance, the social assistance benefit to able-bodied beneficiaries falls by half after three years in the program. Most countries in the region have introduced important pension system reforms in the last two decades: increasing retirement age, indexation reforms, changes in benefit rates and contribution rates, among other measures. However, as argued in a forthcoming World Bank regional pensions report, pension reforms to date have been insufficient. Increases in retirement age, for example, have had only a small effect on the duration of retirement given concomitant increases in life expectancy.

**108. Romania should continue its ongoing ambitious, wide-ranging reform of its social assistance system.** The large number of non-contributory social assistance entitlements features an overall targeting accuracy (37.7% in 2009) that is on the low side in transition economies, due to the prevalence of categorically-targeted programs. The Romania Social Assistance System Modernization project, supported by the World Bank, aims at improving the overall performance of Romania's social assistance system. As part of the reform program, three means-tested benefits are being merged into a single program targeted at the poorest quintile of the population, called the Minimum Social Insertion Income Program (MSIYP). These programs are the Guaranteed Minimum Income program (GMI); the Family Benefits (FB); and a seasonal Heating Benefit (HB). The GMI and FB have behavioral conditionalities attached to receipt of benefits. Able-bodied adults benefiting from the GMI program are expected to work. Children of school-age of the FB program are expected to regularly attend school; otherwise they face a reduction of their benefits or even suspension of their benefits. The MSIYP is expected to be implemented starting with January 2014, preserving a number of design elements from the individual programs to be merged, namely means-testing, work and activation requirements, and school attendance conditionalities.

**109. Support to these efforts of consolidation and an effective design of the MSIYP are central to a modern Romanian social assistance system.** The professed objectives are to improve the overall targeting accuracy of social assistance spending, increase the employment rate of the

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<sup>45</sup> See, for example, Betcherman, Daysal, and Pages (2008).

adults who are able to work from the poorest quintile, reducing the fragmentation of the social assistance system, as well as reducing the administration costs of the means-tested programs and the private cost of the applicants. The MSIY program will therefore be expected to improve efficiency, equity and contribute to the accumulation of human capital for its beneficiaries.

110. **The current GMI formula is likely to trigger disincentives to work, and it would be advisable to consider options to change it.** The program benefit level is the difference between the GMI threshold and the per capita income of the family. If family earnings increase over a certain range, all the extra earnings result in reduced benefits, hence the program has a 100% marginal tax rate on earnings (MTRE). Such a benefit formula is very likely to generate disincentives to work – not surprisingly, about 42% of the GMI beneficiaries who are able to work do not work, possibly because work does not bring extra returns. Key areas for the design of the new MSIYP are improved eligibility criteria to achieve greater accuracy of targeting, “making work pay” by reducing the marginal tax on earnings associated with the GMI formula from the present 100% to 33%, 50% or 67%, examining options for school conditionalities and targeting to generate stronger school attendance effects. The use of income disregards (i.e. earned income that is not considered when deciding eligibility for social benefits), and other forms of in-work benefits common in many EU15 economies, can be effective in avoiding undesired trade-offs with regard to the impact on poverty (and the associated EU2020 target), and benefits rationalization. They can even extend support to the working poor.
111. Finally, **pension reforms to rationalize benefit levels, including gender equalization and increases in retirement ages, flatter pension schemes, and gradual retirement options, are part of the policy tools for Romania to achieve its EU2020 employment target.** A forthcoming World Bank report on pensions in Europe and Central Asia proposes some options and policy directions that could be fitted to the country context.
112. It should be noted that, as important as they are, **recent research in behavioral economics warns that incentives need not immediately translate to changes in behavior.** It is important to consider the psychological and social foundations of incentives. Work decisions depend on many other features of the workplace environment, including employee morale, job security, and the perceived "fairness" of one's pay. As noted in World Bank (2012), survey evidence reveals that trust and dissatisfaction with public institutions may cultivate a social norm of noncompliance with taxes and reduce participation in institutions like pension schemes. It is well known that the attitudes towards risk of young workers, who have to pay contributions now, impact how they value the resulting future entitlements and how certain or uncertain they see these entitlements.<sup>46</sup> In this context, the use of the so-called “default rules” can have substantial effects on participation in voluntary retirement savings plans.<sup>47</sup> Thus, policies to encourage participation in formal employment should factor in ways to cultivate social norms and attitudes for participation in pension schemes.

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<sup>46</sup> A recent study found that lower cognitive ability is associated with greater risk aversion, and more pronounced impatience—factors known to affect old-age savings decisions (Dohmen, Falk, Huffman, and Sunde (2010)).

<sup>47</sup> For instance, Turner and Verma (2007) show that of those who were eligible to participate in 401K plans in the United States but did not, 40 percent responded that they could not afford to. Yet, when a sample of individuals was subject to automatic enrollment with a later option to opt out, they substantially increased their participation. Many allegedly income-constrained workers did not opt out, thus suggesting that for many, the contributions were, in fact, manageable.

## *Fostering labor market inclusion*

113. **Beyond work disincentives, several groups in Romania face additional barriers to productive employment which lead to exclusion from the labor market.** In addition to inadequate skills, discussed above, adverse attitudes and social norms, overly rigid working conditions, limited information and networks, represent obstacles to jobs search and impact the types of jobs disadvantaged groups obtain. A recent study for ECA countries finds high inequality of opportunity in access to employment in the region, related to individual's circumstances such as gender, parental education and self-reported minority status.<sup>48</sup> Women earn, on average, 30 percent less than men in Romania, regardless of their age, education and location. Employment rates for Roma men and women are 42 and 19 percent, respectively, significantly below the employment rates of men and women in the general population. This and the fact that Roma earn much less than the general population implies that the average productivity of working age Roma men in Romania is estimated to be far below that in the general population (see Box 2). These gender and ethnic gaps could be a reflection of differences in other characteristics such as gaps in cognitive and non-cognitive skills (as later documented in the section on education), choice of type of jobs or occupations or plain discrimination leading to unequal pay for equal work. Romanians report that discrimination is more common in labor markets than in other settings.<sup>49</sup> Older workers are particularly disadvantaged. A recent Eurobarometer survey<sup>50</sup> found that more than half of the population believes that being over 55 years old is the most important barrier to job opportunities – more than looks, disability, race or ethnicity and gender. Negative attitudes towards certain population groups can manifest themselves in other subtle ways, especially when they are engrained in the culture and become social norms. Women's participation in the labor markets is often limited by the traditional role assigned to them as housewives and main caregivers.
114. **Family care responsibilities coupled with the lack of affordable child care limit employment options for women. This partly reflects social norms and labor regulations.** As in other countries, the gender gap in Romania in labor force participation widens for women in childbearing years. Parental leave regulations – which usually include different provisions for mothers and fathers – can put women at a disadvantage in their labor market trajectory. Often women who join the labor market generally opt for jobs with more flexible work schedules – when available – and jobs that are more compatible with career interruptions. Such choices result in occupational segregation and lower earnings for women compared to men. Moreover, in Romania childcare is only offered on a part-time basis and overall provision remains low.
115. **The lack of flexible working arrangements limits access to employment opportunities for younger and older workers, and women of all ages.** Today's workplace and labor regulations have been primarily designed for prime-age male workers who can work full-time, have limited family and household responsibilities, completed their formal education and have significant work experience. This does not fit the needs of youth who move between studying and work, older workers transitioning into retirement and women who take time off for maternity leave and childcare or men and women alike who would like options to balance family and work throughout their career. Part-time work could also benefit employers by giving more flexibility to adjust working hours in the economic cycle. Yet part-time employment in Romania, like other

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<sup>48</sup> Abras et al (2012).

<sup>49</sup> European Commission (2012).

<sup>50</sup> Results from 2012 special Eurobarometer (European Commission 2012).

EU10 countries, is less common than in Western Europe, not even reaching 10 percent of the employed. Constraints to flexible work schedules are often embedded in labor legislation, but can also arise from the tax and benefit systems if minimum social contributions are not adjusted for hours worked which amounts to a double penalty for anyone working less than full time.

### **Box 2: Achieving Europe 2020 goals and the link with Roma inclusion**

Demographics and labor market exclusion also make Roma inclusion a macroeconomic necessity for Romania and other EU Member States with large Roma populations. Today, approximately 17 percent of the general population in Romania is 65 and years or older. In 2040, this is estimated to rise to 28 percent. At the same time, the share of new labor market entrants in Romania that is Roma is large and growing; those aged 0-14 years – the new generation of labor market entrants – make up 36 percent of the total Roma population, compared to 15 percent for the same figure among the general population. Depending on the total size of the Roma population, this means that between 6-20 percent of labor market entrants in Romania today are Roma.

Large gaps in average productivity of the labor force. A recent UNDP/World Bank/EC regional Roma survey (2011) shows, that the vast majority of Roma express a desire for stable jobs, similar to the responses of non-Roma neighbors. Yet employment rates continue to lag far behind those of the majority populations, behind the Europe 2020 headline target of 75 percent of the population aged 20–64 employed, and behind the Romania specific 2020 target of 70 percent. While in 2011 66 percent of men and 53 percent of women of working age (15-64) in the general population are employed; only 42 percent and 19 percent of Roma men and women have jobs – including informal employment. The surveys also show that employed Roma earn a fraction of the average earnings of the general population. As a result of low employment rates and low wages, the average productivity of working age Roma men in Romania is estimated to be only 20 percent of that in the general population, and among Roma women even lower: 12 percent.

Roma inclusion has become part of mainstream European policy making. The April 2011 EU Framework for National Roma Integration Strategies up to 2020 clearly positions Roma inclusion as part of the overall Europe 2020 strategy of smart, sustainable and inclusive growth. In its May 2012 Communication, the EC explicitly states that “[f]or Member States with a larger Roma population making sufficient progress towards the Europe 2020 employment, social inclusion and education targets will require addressing explicitly and swiftly the situation of the Roma.” The EU therefore urges the Member States to ensure that EU funding available makes a tangible difference to Roma communities.

End of 2011, Romania has presented its National Strategy for Roma Inclusion. The Romanian government launched the Strategy of the Government of Romania for the Inclusion of the Romanian Citizens Belonging to Roma Minority for 2012-2020. The Romanian Strategy calls for actions in the following priority areas: A. Education, B. Employment, C. Health, D. Housing and Small Infrastructure, E. Culture, F. Social Infrastructure. Romania can take advantage of the forthcoming (2014-2020) programming period of Structural Funds to significantly improve Roma integration. For example, for the current programming period (2007-2013), the ESF in Romania co-finances projects addressing Roma people, directly or indirectly. The latest data (May 2013) show that 102 contracts targeting Roma have been signed for a total value of EUR

253.36 million. Until now approximately 33,000 Roma people had participated in projects co-financed by the ESF.

116. **Disincentives and barriers often overlap for disadvantaged groups.** As noted before, the GMI formula has 100% marginal tax rate on earnings (MTRE), which creates disincentives to work. Among the beneficiaries of the GMI program in Romania, close to half are capable of work but face strong disincentives and/or barriers. Three quarters of beneficiaries are in rural areas, where labor demand is thin and distance to the urban labor market is high. One third has no education or only primary education and about 40% are women with children, many of them with young children. A majority of NEET youth come from the poorest quintile and about one third of them are closer in relative terms to the labor market. Another third could be brought in with some employment support; and about one third is hard to serve.

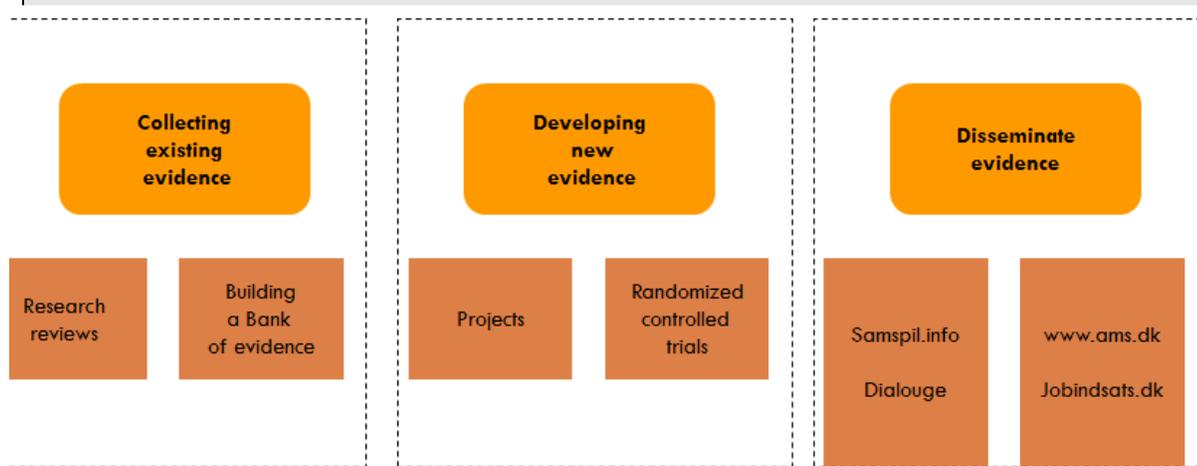
### *Policy options for Romania*

117. **Romania would benefit from smarter active labor market programs that rely on tools and processes for systematic, data-driven, profiling of beneficiaries.** These would aim at identifying those that are hard-to-serve, hard-to-employ, and those on social benefits, and would allow support services and interventions to be devised that could address the employment barriers faced by various groups. Such mechanisms are increasingly commonly used in the EU15 countries. Countries are also looking to consolidate access to employment services and social benefits under one window, or as additional support for job searches. The UK's Jobcentre Plus is an example of this. It provides career advice, access to job vacancy databases, occupational training, sector based work academies, and access to internships, apprenticeships and volunteer programs.
118. **Selected use of rigorous impact evaluations can promote the most cost-effective active labor market programs for Romania to achieve its Europe 2020 employment target.** For example, of the existing impact evaluations on the effectiveness of active labor market programs, some are more rigorous than others. The available global evidence indicates that the impact of active labor market programs is mixed. A recent review found that to improve labor market outcomes for unemployed people: (a) subsidized public employment is relatively ineffective; (b) job search assistance (which is often the least expensive) is more likely to yield positive results, especially in the short run; (c) classroom and on-the-job training is unlikely to yield positive impacts in the short run but is likely to yield relatively positive impacts over the medium term (two years). The European Commission recently instituted a Progress Facility that finances social policy randomized evaluations. And, several EU15 countries (e.g., France, Denmark, and UK) are systematically using these evaluations for designing smarter evidence-based policies (see Box 3).
119. In this context, **it is advisable that legislative initiatives recently proposed under the National Jobs Plan are assessed on the basis of their cost-effectiveness and are informed by international experience.** One particular objective of the proposals is to enhance job creation for young Romanians and to smooth their transition into the job market. One of the measures under consideration is a revision of the current system of employment incentives. The current legislation in this area provides support for a large number of groups rather than targeted support for those most in need. It has had a low take-up as employers have the obligation to repay with interest any social security contribution reductions in the event that the firm and employee separate, which increases the risk for employers hiring 'risky' groups. The consensus from

empirical studies that have systematically analyzed such regimes is that they have at best a small impact and at worst can generate important net efficiency losses due to increased job turnover - employers abuse of the system by reshuffling vacancies - and fiscal transfers that do not lead to additional job creation. When such incentive schemes are found to be effective, they are typically narrowly targeted to particularly vulnerable groups (e.g., ethnic minorities, unskilled) and/or address temporary shocks to labor demand. Wage subsidies or tax incentives should be carefully designed in order to ensure that they are simple, transparent, well targeted, can be monitored, and do not further complicate tax administration or weaken revenue collection. Finally, it is important to ensure that the scope of the temporary exemptions to social insurance contributions does not have unintended impacts on the financial sustainability of the social security system (particularly on future pensions financing).

### Box 3: Evidence-based labor policies by the Danish Labor Market Authority

The Danish Labor Market Authority (LMA) has taken a very proactive approach towards building up evidence on its employment policies, including for vulnerable groups. Its strategy consists of three complementary activities: (1) collecting existing evidence from research reviews on comparable active labor market programs; (2) developing new evidence through randomized control trials of selected LMA projects; and, (3) disseminating evidence to its affiliated job centers, the Ministry of Employment, and the public at large. Information about job center output is available for everyone on the internet.



In designing and carrying out these evaluations, the LMA works closely with external evaluators – Danish academics – and a selection of its affiliated job centers. Denmark has 98 municipalities, with 93 integrated job centers for all job seekers (insured and uninsured). There are also 4 regional employment councils.

So far the LMA has completed 4 randomized control trials, 2 evaluations are ongoing, and a new one started in August 2012 serving particularly vulnerable groups. In each evaluation, the comparison group is offered the regular package of employment services while the treatment group receives something ‘extra’. For example, the first evaluation consisted of an intervention whereby job seekers were offered bi-weekly counseling as opposed to regular counseling every three months. In the upcoming evaluation, a ‘social mentoring’ pilot will be evaluated. The target group consists of youth 18-29 year olds far from the labor market. Local job centers will be provided with funding to hire social mentors who will give intensive

counseling to vulnerable youth, including advising on accessing social services and education and training opportunities.

*Reference:* [www.ams.dk](http://www.ams.dk) and [www.jobindsats.dk](http://www.jobindsats.dk)

120. **As discussed in more detail in the education and skills development section, there is a need to fundamentally rethink adult education, training, and lifelong learning systems.** With regard to skills building through labor market training, there are three key directions: (i) a stronger policy coordination between government, training providers and the enterprise sector, with a sound regulatory regime for the development of private provision; (ii) appropriate incentives for firms to engage more in training of adults and older workers; (iii) a concerted effort by employers, governments and workers to invest more effectively in training at older ages. Foremost policies should strive to support those firms which, despite positive expected returns, would not train otherwise. Some firms may not invest in training simply because this does not pay, i.e., the expected rate of return is lower than the (opportunity) cost of funds. This may result from low expected benefits from training (likely for lower productivity firms) or high training costs (likely for smaller firms). In the former case, the focus should be on policies to promote the enabling environment where they can thrive (as discussed in the macro-economic section and earlier in this section), become more productive, and thus experience positive expected rates of return on training. Other firms may benefit from investments in training but cannot realize these due to market failures. This includes concerns of worker turnover, in part due to poaching by other firms, or liquidity constraints.
121. **Payback clauses and apprenticeship contracts can be used to deal with poaching externalities.** The former are most common in more advanced economies where there is capacity to enforce them. Germany offers a paradigmatic example of apprenticeship programs both school-based and on-the-job training, which are well-regarded by both workers and employers.
122. **Credit and subsidies are used to deal with liquidity constraints that prevent investments in on the job training.** Credit programs require considerable information and administrative capacity to target genuinely constrained firms without producing gaming, large deadweight losses and substitution effects. One possible approach is to allocate subsidies to priority areas based on consultations with enterprises, including SMEs. For instance, when due to coordination failures investments are not taking place in high-potential sectors because workers with the right skills are in short supply and the private sector is not taking the risk to train workers. Subsidies could be allocated in the form of matching contributions through competitive bidding.
123. However, firm training is less likely to cover general training, for example, on socio-emotional skills. Moreover, less experienced and less educated workers and those employed in small enterprises tend to benefit substantially less from on-the-job training, which leaves a large fraction of an aging workforce excluded. These gaps should be filled by ALMP-training. However, the international evidence on life-long learning and training interventions for workers who leave school before completing basic education shows a mixed track record, ranging from programs (vocational or publicly provided training) producing very limited impact, to privately-provided but publicly financed disadvantaged youth training programs shown to have significant returns.

124. In the light of gaps in basic skills that probably affect many young and adult workers, **Romania could benefit from using targeted training programs that distinctively focus on the needs and learning aptitudes of youth and older workers.** These programs could address both technical and basic generic, especially socio-emotional skills. The programs, now common place in many Latin American countries, have a proven track record of providing value addition through a combination of class-room and workplace training. Rigorous evaluations have shown important impacts on developing socio-emotional and technical skills and employment outcomes of youth. They ensure training is relevant to market needs by engaging employers early on to secure apprenticeships. They could be complemented with features of mentoring programs, as there is evidence that youth participants develop socio-emotional skills from such interventions.
125. **Emerging findings from various disciplines and recent evaluations of training programs suggest that these cannot be age-blind.** Emerging findings from neurology, psychology, and education challenge many long-held views about adult learning and the effectiveness of adult training.<sup>51</sup> As scientists look deeper into how brains age, they have found that different abilities tend to follow relatively independent paths over the lifecycle. Some abilities, like the performance and speed of solving new tasks, are strongly reduced at older ages, while other abilities, like verbal capacities and word fluency, remain at a high functional level until late in life. As people pass middle age, the brain gets better at recognizing the central idea, the big picture, and if kept in good shape, can even find solutions much faster than a younger brain. Prior experience and knowledge plays a much more fundamental role in how older workers learn new skills compared to younger individuals.
126. **New insights from this research and promising interventions suggests that with appropriate training strategies, mature brains can learn new skills.** Recent evaluations of a range of public and private workforce training strategies in the US, largely focused on the needs of adults, have been shown to produce returns as high as 10-26 percent when program impacts are followed over longer periods than in previous evaluations of training programs<sup>52</sup>. Key features of promising strategies to train older workers include establishing clear links to employers beforehand - to ensure relevance, but also to overcome any reluctance to hire older workers - and competence-based training organized as series of shorter modules and fully built on recognition of prior learning. As noted before, older workers can use the tacit know-how and maturity (stronger non-cognitive skills) derived from experience and aging to add new skills and contribute effectively to age-diverse teams.
127. Romania could start from a diagnosis of the policy and institutional factors that influence how well the technical and vocational education and training (TVET) system meets skills demanded by employers. The World Bank SABER (System Assessment and Benchmarking for Education Results) Workforce Development (WfD) offers a practical and systematic tool for involving stakeholders in such assessment and identifying reform actions in light of international good practices. WfD identifies 9 policy goals and 18 related policy actions in three functional dimensions (strategic framework, system oversight, and service delivery). These are benchmarked in four stages of development (latent, emerging, established and advanced). Applications are completed for four relevant benchmark countries (Chile, Ireland, Korea, Singapore), and ongoing applications have started in other countries (Armenia, Bulgaria, Georgia, Former Yugoslav Republic, Macedonia and Turkey) as well as in a number of other

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<sup>51</sup> Johnson and Taylor (2006), and Maestas and Zissimopoulos (2010).

<sup>52</sup> See Besharov and Cottingham (2011).

countries in East Asia. When applied retrospectively, this tool can provide a useful picture of how the pre-employment TVET system has evolved in the various dimensions, pointing to strengths and gaps, as illustrated in the case study for Ireland.

128. As discussed in the next section, Romania could build on lessons of TVET systems that feature strengths in the various dimensions. For instance, Belgium, the Czech Republic and Switzerland manage to achieve good results in generic skills formation, as measured in PISA, despite maintaining a relatively early vocational tracking of students. These countries maintain very good data on education and labor market outcomes to guide student choice, assess performance and/or draw evidence to be used extensively in reforms. Others, like Ireland (through the so called Skillnets) and South Carolina in the US (through its Career and Technology Education) feature innovative ways of engaging employers in a bottom-up approach and a strong apprenticeship system with ample career guidance to students, while the dual systems of Austria and Germany are known to perform well in these areas through their strong social partnerships between government, employers and providers.
129. **It would be important for the Romanian government to engage employers and training providers in rigorous impact evaluation of new training initiatives.** These should include serious cost-benefit analysis and also provide for learning about the duration of program impacts. Most evaluations of ALMPs in Europe provide only a year or two of follow-up. The available evidence on longer-term impacts for the US suggests that sometimes impacts remain remarkably steady over time for years after an intervention, other times they fade out, and other times they appear only belatedly.<sup>53</sup>
130. **Romania can look into what some countries are doing to build more flexible work schedules.** In Hungary, since early 2010, it is compulsory in the public sector to provide part-time employment on a 20-hours weekly basis to employees returning from maternity leave, at least until their child is three years old. In countries like Armenia, Latvia, Montenegro and Russia, employees with minor children have additional legal rights to a flexible or part-time work arrangement.
131. **Finally, Romania can learn from the experience of countries that have taken a wider approach to bring women into the labor market.** For instance, between 1995 and 2004, Canada boosted its already high female labor force participation rate by almost 6 percentage points to a large extent through more family-friendly policy initiatives and tax reforms. Tax wedges for secondary earners (usually women) were cut and prioritization of early childhood development paved the way for expanding childcare and family benefits. In Southern Europe, substantial increases in female employment over the past decades have been partly attributed to gradual but steady changes in culture and social norms in favor of greater women's participation in the labor force.
132. **The private sector and advances in modern technology and new management practices are also paving the way for more inclusive labor markets.** Some firms are addressing the aging challenge head on by adapting working conditions and the environment to benefit workers and business. For example, the German car company BMW piloted adjustments to a production line with older workers to address health, skills, workplace environment and other challenges

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<sup>53</sup> This was actually the case in the evaluation of German training programs by Lechner, Miquel, and Wunsch (2004).

associated with their aging workforce. Such changes – which included special chairs to reduce physical strain, magnifying lenses and stackable transport containers – resulted in a 7 percent increase in productivity in one year to match productivity levels of production lines with younger workers.

133. **Recent studies, also from Germany, shows that there is indeed an impact from specific measures for older employees on the productivity of older workers.** Using a large matched employer-employee survey, Goebel and Zwick (2010) compare plant-level productivity profiles of workers across age ranges in firms that use such measures compared against those which do not. They categorize these measures into five different groups: (i) workplace adjustments; (ii) re-assignment to age-specific tasks; (iii) mixed-age working teams; (iv) reduced work time; and (v) training. Within the representative sample of German companies, about 50 percent used at least one of these measures for older workers in 2002. Importantly, though, not all of these measures have the same - or any - impact, which again underscores the importance of design-testing interventions at a small scale and evaluating them to judge the suitability and best ways to scale them up. Finally, modern technology and new management practices have opened up a wide array of alternative and more flexible work arrangements, including new forms of contractual arrangements (e.g., on-call contracts, freelance contracts and telework). For white-collar workers, computers, mobile devices, internet access, videoconferencing, have made it possible for people to work productively outside of the traditional office space. Similarly, for blue-collar workers, technological advances have automated many processes that allow for more flexible shifts.

### **Key elements of a policy agenda to achieve the EU2020 target**

134. **This section has argued that Romania can achieve the EU2020 employment target if there is a sustained emphasis on the reform effort and if specific policy measures are adopted.** This requires effort under two pillars: (i) fostering job creation by private business growth and entrepreneurship, (ii) age-sensitive investments in skills and labor policies to improve work incentives and inclusion, in the face of the country’s demographic outlook. The section highlights a menu of policy options for a rebalancing of the two main pillars of the country’s social model, namely, jobs and social protection.
135. **How can Romania move forward?** A succinct blueprint of possible directions for policy priorities follows:

**Recommendation 1.** Strengthen job creation (also needed to offset inevitable job reallocations), while fitting policy priorities to demographic imperatives. Policies include:

- Advancing reforms, economic integration and diversification to facilitate firm entry/exit and to create enabling environment for businesses with high potential to thrive and create jobs and others to “fail fast, fail cheap”. As discussed in the macro-economic section, advance SOE restructuring, especially in the energy and infrastructure sectors, and Doing Business reforms, and pilot interventions to foster entrepreneurship among youth and older workers (along the examples discussed before in this section) who have accumulated the skills and know-how in their occupations and have potential to lead successful start-up firms.

**Recommendation 2.** Make workers more adaptable, develop incentives for work, and encourage more inclusive labor markets (eliminate barriers):

- Implement age-sensitive labor training programs to remedy basic (especially socio-emotional) and technical skills deficiencies of disadvantaged joblessness youth (including Roma) and of older adults outside the labor force, fit to market needs with apprenticeships – learning from successful youth training programs in Latin America, adult training programs in the U.S, Europe and other OECD.
- Improve work incentives by lowering the tax burden for low-wage and second earners, and remove barriers to work for youth, Roma, older workers and women through evidence-based ALMPs. Continue ongoing social assistance reforms to consolidate and tie social benefits to work requirements with the combined support through active labor market policies based on profiling of beneficiaries, and adaptation of labor regulations to facilitate the employment of women, youth and older workers through more flexible work schedules.
- Engage businesses in implementing measures to foster a more inclusive labor market, such as adaptations to the workplace for older workers, age-sensitive OJT, promotion of age-diverse teams, etc. – learning from recent experience in OECD countries.
- Face up to demographic imperatives. Establish smart migration policies to tap on needed talent in the Romanian diaspora.

#### **IV. Education and Skills Development – From Continuous Change to Continuous Improvement<sup>54</sup>**

136. As noted in the previous section, preparing workers for the requirements of the modern workplace starts with prioritizing the development of strong generic skills foundations. This section discusses the role of Romania’s education systems in this regard.

137. **Education plays an important role in Romanian society.** Romanians rightly take pride in their country’s long and impressive education tradition.<sup>55</sup> **At the same time, there are concerns about the way the education system has evolved over recent decades.** The education section of this report will discuss to what extent such concerns are well founded. Accordingly, the section sets out to answer the following questions:

- Does the Romanian education and training system provide quality outcomes in terms of knowledge, skills and competences and does it provide them in an inclusive manner?
- What are the structural and organizational bottlenecks in producing quality in education and training and subsequently the skills demanded by the labor market?

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<sup>54</sup> The chapter was prepared by Nina Arnhold with substantive inputs from Paul Cahu (assessment and education quality) and Mariana Moarcas (in particular on early childhood development).

<sup>55</sup> The first academic institutions can be traced back to the 17<sup>th</sup> century when the Academia Vasiliana was founded (in 1640) by Prince Vasile Lupu in Iasi and the Academy of Bucharest was established by Prince Constantin Brancoveanu.

- What could be done to remove these bottlenecks and to fully develop the potential of the education system to prepare its students for the labor market, for active participation in a democratic society and for happy and healthy lives?

138. **Education and skills play a key role in the Europe 2020 Strategy and other European Commission documents on growth and competitiveness.**<sup>56</sup> As mentioned in the introduction of the report, two out of five Europe 2020 indicators are for education:

- The share of early school leavers should be under 10 percent (Romania target: 11.3 percent; Romania status quo: 17.4 percent)
- At least 40 percent of 30 - 34 year-olds should have completed tertiary education (Romania target: 26.7 percent; Romania status quo: 21.8 percent)

139. At first view, the gap between the status quo in Romania and the European targets for both indicators might appear to be comparable concerns. However, this study argues that **the early school leaving issue needs to receive particular attention**. While a strong stock of high quality graduates is without doubt of importance for the overall competitiveness of the country, we would like to make three observations concerning the tertiary graduate indicator: First, the indicator refers to the *stock* of 30 – 34 year olds with a higher education degree. It thus mainly reflects policy choices impacting on the sector a decade ago. Policy makers today can influence the current and future *flow* of tertiary education institutions; however, they cannot change the past.

140. Second, despite significant expansion of the system, returns to tertiary education are still high and tertiary education is the best ‘unemployment insurance’ as the employment section shows. This study, further, argues that **the lack of a tertiary degree does not deprive young people of life chances in the same way that the drop-out from compulsory schooling does.**<sup>57</sup> This fact is well illustrated by recent data that show that the unskilled represent a particularly high share of unemployed persons under 25 years of age in Romania (see Annex 1, yellow). The mere quantity of tertiary education students should not be a major source of concern at this stage.

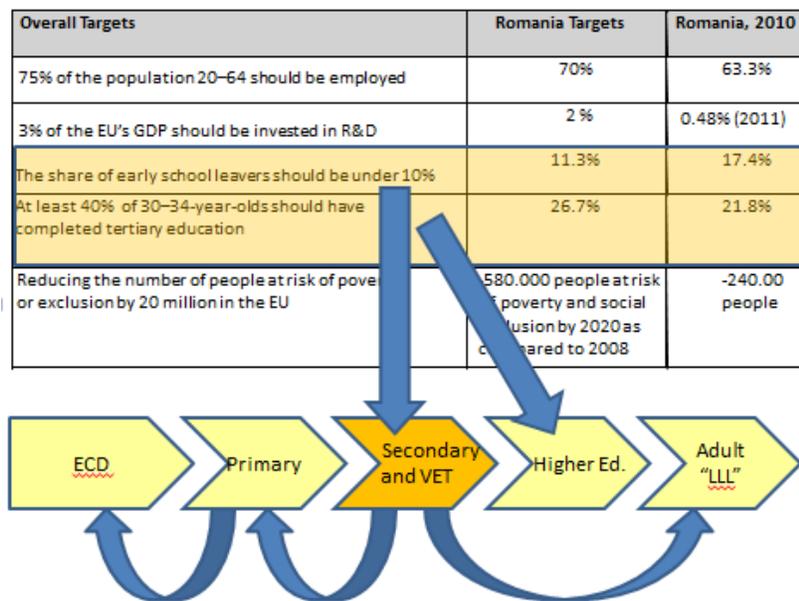
141. The discussion of policy options to tackle performance issues related to the status quo of the Europe 2020 education indicators will need to refer to different levels of education. **It is difficult to mitigate the problem of school drop-outs at the stage when it occurs. The problem needs to be addressed proactively and much earlier on.**

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<sup>56</sup> See for example European Commission. (2010a)

<sup>57</sup> The school leaving indicator has seen slight improvements over the last two years. It dropped from 18.4 in 2010 to 17.5 in 2011 and 17.4 in 2012 (Eurostat data).

**Figure 27: Europe 2020 education indicators and their connection to education levels**



Source: European Commission ([http://ec.europa.eu/europe2020/europe-2020-in-your-country/romania/index\\_en.htm#content\\_4](http://ec.europa.eu/europe2020/europe-2020-in-your-country/romania/index_en.htm#content_4)), World Bank

Figure 27 illustrates that results of early childhood development (ECD) and primary education greatly impact on the learning experience and learning results of students at the secondary level, as will be discussed in following sections. Problems which occur at the secondary stage – with regard to drop-outs and ‘dead ends’ in terms of learning can to some extent be mitigated through adult education. However, it will be much more difficult to endow students with skills - in particular generic skills - which they didn’t acquire through learning at earlier ages through remedial and second chance education and training. Thus (as illustrated by the blue arrows on the bottom), addressing a systemic problem which occurs at the secondary education stage will require reconsideration of policy options and the consideration of the possibilities for ‘changing gears’ at earlier levels.

### **Challenges: Does the Romanian education system deliver?**

142. **There are two distinct ways of thinking about results of learning:** One is to take degrees as certified information on education attainment and as a good enough proxy for the knowledge, skills and competences acquired through schooling and other forms of education. However, the last years have increasingly seen concerns regarding the trust-worthiness of the information provided through education certificates, inter alia fuelled by the existence of ‘degree mills’, incidents of corruption and favoritism and particularly by information provided by employers which question the value of degrees provided by educational institutions.
143. **Another approach is to measure knowledge, skills and competences directly, for example through international assessments which use the standardized methodology across countries.** In particular PISA<sup>58</sup>, OECDs *Program of International Student Assessment* has

<sup>58</sup> For a discussion of connection between learning achievements as measured by PISA and growth, see OECD (2010).

fuelled the debate on education quality and equity in a range of OECD countries. PISA is administered at the age of 15; however, it is important to keep in mind that it is only administered to students *who are still in the education system*. Students who have already dropped out at this stage will not be covered by the test. PISA has the advantage of providing data which can be compared across countries, along a range of dimensions, providing the interested public with a good indication of quality and equity of education systems. It focuses on problem-solving skills, i.e. there are cognitive dimensions which are not covered by the tests. However, the particular nature of the skills tested in PISA make the test a good predictor for future abilities of students to integrate into the labor market and actively contribute to society.

144. **Some European countries had a ‘PISA shock’ when they were confronted with the results in recent years. And others went into PISA denial.** As Karl-Heinz Gruber noted, ‘[n]owhere did PISA have a similar tsunami-like impact as in Germany. The political and media reaction triggered by the publication of the PISA 2000 results was extraordinary...’ (Gruber, K.H. in Ertl, H., 2006). However, while normally a ‘shock’ would be an impact of short duration, it seems that Germany has been in PISA shock ever since and embarked on a series of reforms which have put a lot of stress on teachers, families and students. At the same time, German states have not or only half-heartedly address the most pressing issues, i.e. questions of school readiness and of streaming of students at the lower secondary level.
145. One could argue that, in contrast, **part of the Romanian public has been in a state of PISA denial.** While it is sometimes argued that ‘these international tests don’t measure the things we teach in our schools’, the question could be rightly asked if this is not at the heart of the problem given that these international tests focus on problem solving skills needed for a successful integration into an evolving and modernizing labor market (see the employment section) and a democratic society which does not offer ready-made solutions for ensuring a happy and healthy life.
146. However, **national (Baccalaureate) exams in Romania support the problematic findings of international assessments. In fact, half of the students taking the Baccalaureate exam in 2012 failed,** indicating a deterioration in the provision of human capital desperately needed for modernizing the Romanian economy.
147. A World Bank note (Cahu (2013)) looked at the quality of education provided in Romania using PISA, PIRLS and TIMSS data. The note analyzed i) recent trends in students’ performance; ii) disparities in performances across space and social groups and iii) the various determinants of education quality. The following section summarizes some of the main findings of the note.
148. First, **the quality of education delivered in Romania is not in line with expectations given the level of development.** This diagnosis holds when considering all the recent international assessments such as PISA, PIRLS<sup>59</sup> or TIMSS<sup>60</sup>. In fact, Romanian performance in all international assessments covered has either stagnated or deteriorated despite significant economic growth (GDP per capita, see the macro-economic section) and, at least partial, improvement of ‘socio-economic conditions’ according to PISA. This development is illustrated in Table 2.

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<sup>59</sup> Progress in International Reading Literacy Study.

<sup>60</sup> Trends in International Mathematics and Science Study.

149. **These shortcomings concerning the provision of basic skills to the newer generations is very likely to limit the quality of the higher education system and to impede economic growth in the long-term.** If Romania had been able to bridge the education quality gap with OECD by 2009, per capita income would be likely to be 25 percent higher by 2020.
150. Although inequalities between students are not particularly large, inequalities of opportunities are sizeable. This means socioeconomic conditions of children do matter for their academic achievement. **Disparities between ethno-linguistic groups are significant and could be at least partially reduced.** At least half of the performance gap in reading of ‘dialect’/minority language-speaking students could be eliminated, especially by reducing social segregation in schools. Spatial disparities are also significant as students living in big cities and urban centers are more likely to benefit from a more favorable school environment than the ones living in rural areas. Expanding access to pre-primary education and improving the quality of teaching practices in rural schools could partially reduce the gap.
151. **The Romanian education systems suffers from serious systemic inefficiencies,** meaning that having accounted for all observable factors, reading performance is systematically lower in Romania than in other countries. Although the precise cause of the gap still needs to be investigated, it can be noted that it has been growing. Shortages in some non-cognitive skills, such as persistence, may explain some of this gap. Another conclusion which the study draws is that the quality of teaching practices and learning strategies can be improved significantly in Romania. By improving materials and tasks used for reading, the quality of interactions with students, the management of discipline and the promotion of the most efficient learning strategies, Romania could probably improve average PISA scores by half a year of schooling.
152. The fact that better socioeconomic conditions did not translate into performance gains is concerning and suggests **a deterioration of the overall efficiency of the education system and/or system inputs,** as will be discussed.

**Table 2: Evolution of assessment results and of economic indicators in Romania (2000 – 2009)**

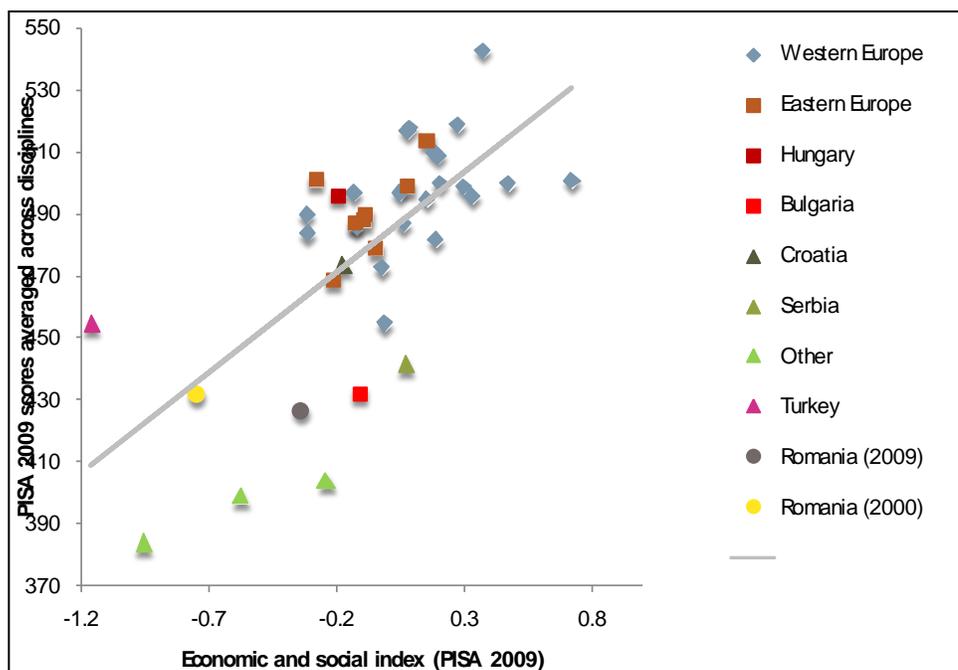
	2000	2009	Evolution
PISA - Reading	428	424	-3
PISA - Math	426	427	1
PISA - Science	441	428	-13
	2001	2011	Evolution
PIRLS (4 <sup>th</sup> grade, reading)	512	502	-10
	1999	2011	
TIMSS 8 <sup>th</sup> grade, math	472	458	-14
TIMSS 8 <sup>th</sup> grade, science	472	465	-7
	2000	2009	Evolution
GDP per capita (PPP, 2005)	6,838	10,797	57.9%
Socioeconomic conditions (PISA)	-0.75	-0.34	0.41

Source: PISA (OECD), TIMSS (EIA) and World Bank indicators

153. One could argue that while the overall picture might be gloomy...

*Romania is also the country where some of the most brilliant young brains in the world are born. Here the rate of gifted children is twice the average worldwide. In July [2012], the country was ranked first in Europe at the International Math Olympics and 10<sup>th</sup> among 100 countries worldwide. [...] Corporations like Microsoft have a big community of Romanians among their workforce and they keep recruiting more. Source: The Economist, 07 August 2012.*

**Figure 28: Average PISA scores vs. average socio-economic conditions in Europe**



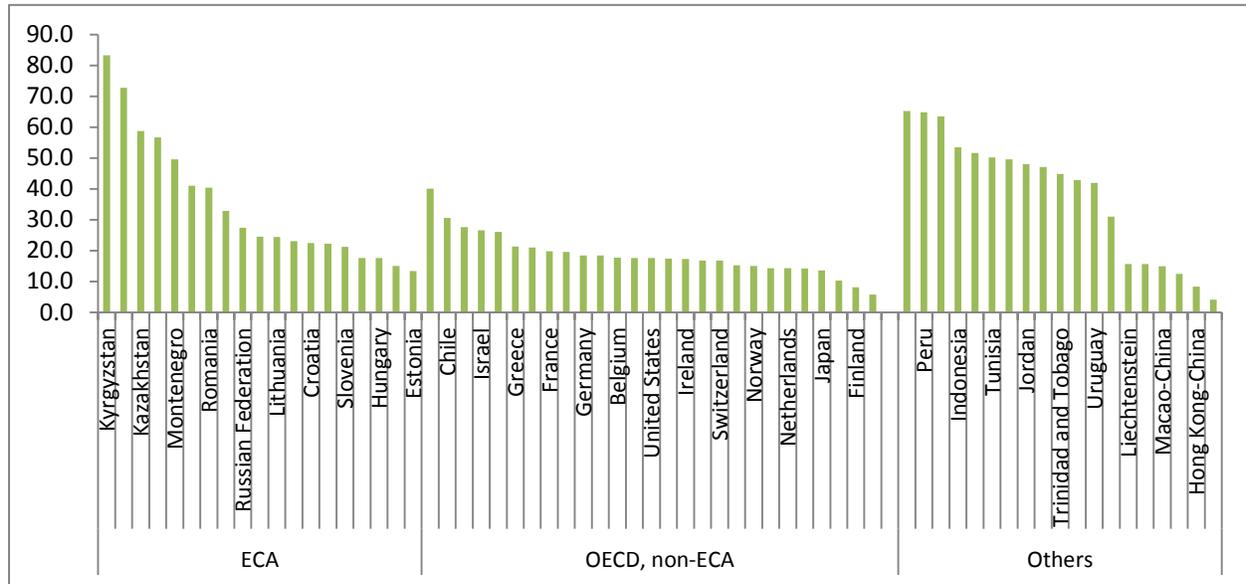
154. Given the extraordinarily high migration rates (about one quarter of the active labor force migrated during the last two decades – and presumably a high share of those are well endowed with skills<sup>61</sup>) it can be questioned how much comfort one can find solely in the results of Math Olympiads. These types of Olympiads have always been very popular across Central and Eastern Europe. Interestingly, they seem less popular in some of the European countries which perform well in PISA on both quality and on equity dimensions. The reason could be that they symbolize the effort of the individual who competes against other individuals. However, **21st century education is not about the question of who reaches the goal first but is about a collective effort of learners who jointly find solutions** to pressing problems.

155. **The most problematic message from PISA 2009 is that 40 percent of Romanian students are functionally illiterate** (note: students who are still in the education system). These students are likely not to integrate into the labor market (see discussion of labor outcomes of low-skilled and minorities in the employment section), will face social and economic problems and might

<sup>61</sup> More research into the skills profiles of migrants will be needed.

not be fully able to organize their further learning throughout their life-cycle. This is not a temporary problem but a problem which will most likely persist throughout their lives.

**Figure 29: Percentage of 15 year-olds who are functionally illiterate**



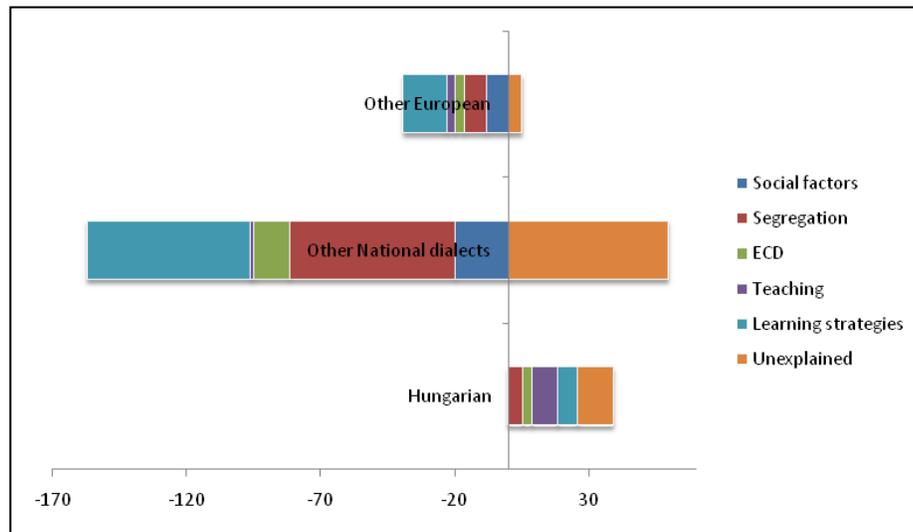
Source: OECD PISA 2009 (proportion of student scoring “below level 2” on reading test)

156. The assessment note (Cahu (2013)) comes to the conclusion that **at least half of the performance gap of ‘dialect’/minority language-speaking students** (which could be taken as a proxy for social exclusion<sup>62</sup>) **could be eliminated** through policy measures. Figure 30 shows the breakdown of the reading performance gap of Romanian speaking students with other students. The graph indicates that students speaking ‘other national dialects’ face the biggest challenges (Romani doesn’t appear as a separate category). However, **the identified drivers for these differences also indicate policy options which could help tackle the disadvantages these students face.**

157. While it might not be possible to change ‘social factors’ in the short run, **education policy makers could focus their efforts on ensuring de-facto (vs. only de jure) desegregation, enrolment in facilities for early childhood education and improvement of learning strategies of socially excluded students.** Overall, it might be beneficial for the system to refocus on learning for all as opposed to selectivity and supporting the best students which seems to be a strong driving principle in some Central and Eastern European countries.

<sup>62</sup> Note that there are no data on Roma speaking students.

**Figure 30: Reading performance gap of Romanian speaking students**

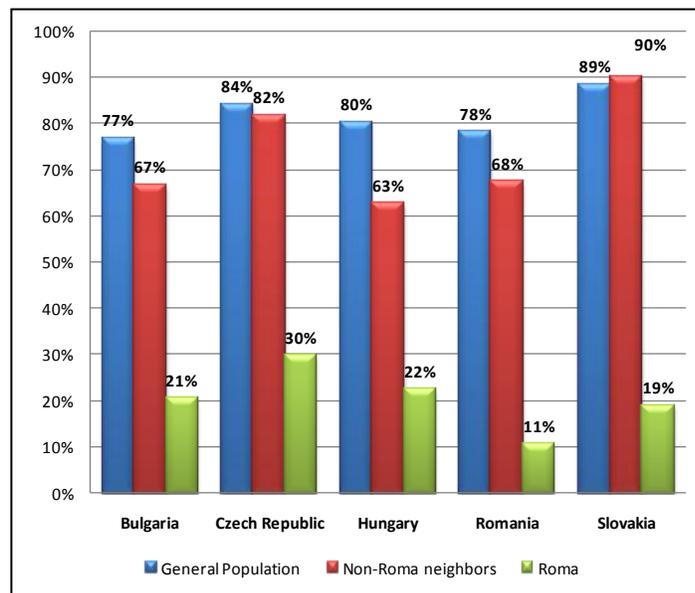


Source: World Bank Staff calculations from PISA 2009

Note: Indices have been built by clustering factors using multipliers derived from a linear (OLS) regression of reading performance on the whole PISA 2009 & PISA 2009+ sample, controlling for educational systems' features through fixed effects. Marginal impacts of the indices have been estimated through a linear regression of reading performance using the Romanian sample only. The breakdown was calculated by multiplying these latter marginal impacts by the difference in each index between Romanian-speaking and other students. The unexplained factor is the remaining component of the gap in reading performance.

158. A detailed analysis of the education attainment of Roma students would go beyond the limitations of this report; however, it would merit further research as there are strong indications for diverging outcomes for the Roma minority, as illustrated by Figure 31.

**Figure 31: Education attainment of Roma in Romania**



Source: EU SILC (2008) and EC/UNDP/World Bank Roma Regional Survey (2011)

Note: General population figures correspond to the year 2008. Data for Roma male. Age 15 drop out 25% of male Roma, 40% of female Roma.

### **Constraints: financing and human resources**

159. The following section will take a closer look at the inputs into the Romanian education system and in particular at education financing levels and at human resources.

#### *A major step forward: decentralization of school management*

160. **Romania has made significant progress in improving education sector efficiency, inter alia by introducing per capita financing** which has led to a consolidation of the school network. The World Bank (2011b) summarizes this important experience which is described in the following three paragraphs.

161. Romania took a major step towards decentralizing the management of schools by introducing per student financing, starting January 2010. Through this, principals received a lump sum amount – based on the number and type of students enrolled in the school – out of which they had to finance all the school’s salary costs.

162. It is difficult to underemphasize how dramatic this shift is from the previous funding system where principals had no influence on budgets whatsoever. In the old system, teachers were essentially a free resources from a school’s perspective: as long as there were enough students to justify opening a class, the teacher (and his or her associated) costs would be paid for by the central government. This implied that principals had no incentives to create bigger classes or worry about the various trade-offs that exist between, say, hiring more inexperienced (but cheaper teachers) vs. fewer but more expensive teachers (more expenditure). In the new system, principals are empowered and incentivized to make sure that salary costs match what the school

receives according to the per student formula. And principals (together with school boards) are now weighing the trade-offs between pedagogical needs vs. financial needs vs. desires of parents and teachers to have smaller classes.

163. The ultimate objective is to achieve higher quality education, by empowering local actors to take more decisions. The change was brought about to introduce better incentives for schools to improve resource use, and also as an important part of the decentralization agenda. MoNE recognized that more flexible financing had to be a core element of a coherent decentralization strategy: greater autonomy to school principals does not amount to much if the way financing is allocated is still tied to rigid norms. The OECD (2004) has recognized that high-performing education systems tend to have local schools and education authorities with a high degree of autonomy. Not surprisingly, most systemic education reforms that have taken place in OECD countries since the 1980s have focused on devolving responsibility for day-to-day decisions to the front lines, that is, to individual schools. The underlying logic behind such devolution is to empower school principals. These principals, who are familiar with their respective staff, students' needs, and local conditions, are better suited to make operational decisions than bureaucrats in capital cities. School-based management, moreover, allows for stronger accountability relationships than micromanagement from the center (see, for instance, Barrera-Osorio, Fasih, and Patrinos (2009)).
164. Having moved in the direction of school based management, the challenge now for Romania's education sector is to put in place a new accountability relationship that focuses on improving learning outcomes and ensuring that the financing system is supporting that goal. By itself, the change in the financing system will not improve the quality of education; it will need to be accompanied by a fundamental shift in the accountability relationship in the sector.<sup>63</sup> To that end, policy makers can employ a range of different options some of which are more rudimentary - and can be put in place faster - than others. All of these options entail risks and trade-offs that must be considered to prevent unwanted effects. A cornerstone in whatever accountability relationship will be developed is that assessment of students' learning outcomes will have to play a more prominent role.

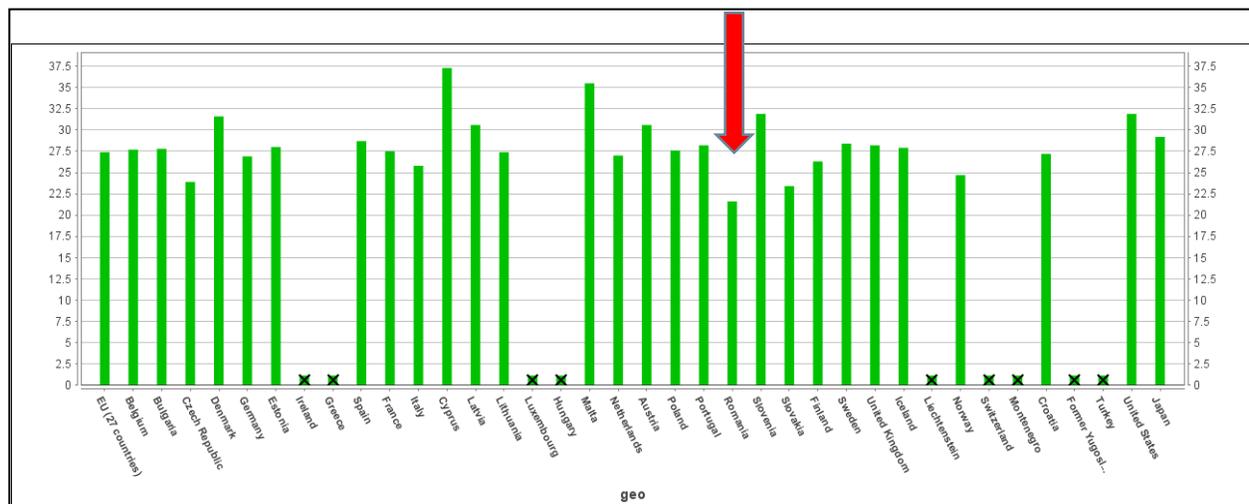
### *Financing levels amongst the lowest in Europe*

165. **Overall financing levels for education in Romania are amongst the lowest in Europe**, based on Eurostat data for 2009. That year, public expenditure for education was at 4.2 percent of GDP in Romania, second lowest to Slovakia with 4.09 percent and contrasting with Scandinavian countries like Denmark (8.72), Sweden (7.26) and Norway (7.24). The average level of education expenditure as a percentage of GDP was 5.41 in 2009 (Eurostat). The percentage dropped from 4.2 percent in Romania in 2009 to 3.5 percent in 2010 and is currently at 4.1 percent<sup>64</sup>. Financing levels by sub-sector are discussed in following sections.

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<sup>64</sup> Eurostat; Romania Insider (2013).

**Figure 32: Aggregated funding by GDP per capita**



Source: Eurostat, World Bank staff

Note: Annual expenditure on public and private educational institutions per pupil/student compared to GDP per capita, for all levels of education combined, based on full-time equivalents for 2009 (last year for which Romania data are available).

166. The low levels of financing in 2010 not only reflect the pressure for further savings in the context of the economic crisis, but also seem to indicate a **further decoupling of education financing in Romania from GDP levels. This suggests that savings from the consolidation of the school network might not have been retained within the education sector** where they would have been needed to finance quality supporting measures and possibly also other measures needed to make the consolidation of the school network a full success. By this we mean that the increased distance of learners from schools bears a risk especially for students from lower socio-economic backgrounds and needs to be accompanied not only by logistics measures but also by enhanced monitoring and counseling to avoid an increase in drop-outs.
167. **It would be timely to have an independent evaluation of the consolidation of the school network following the move towards per capita financing** and especially of the implications for minority students, for students from lower socio-economic backgrounds and for students in rural areas. While the moves toward network rationalization and more efficient use of public funding is a laudable one, conditions need to be put in place to make sure that all students learn and drop-outs are reduced and all together avoided.
168. While there is no clear correlation between levels of funding and system performance at the upper end of education financing, **none of the top performing education systems is found at the bottom of education financing which suggests that there is a ‘too low’ for financing education.**

*Excursus: Budget process – transform financing into a policy instrument*

169. **Budget preparation and budget execution could be improved by making them more policy oriented and realistic**, as the Functional Review 1 has stressed (particularly referring to the comparatively low level of budget execution of 85 percent during the period of 2006 – 2009). At

the time the Function Review 1 was produced, budget proposals were still input-oriented, didn't present trade-offs and alternative policy options and were based on historical costs.

*To make the budget more credible and policy-oriented, a change in mindset is needed. An important problem is that the financing of education is not seen as a policy instrument. In other words, leadership in the Ministry and the people who work on the budget, do not use the "power of the purse" that they have: the fact that money can influence behavior, that incentives can be incorporated into financing mechanisms, and that the Ministry can use its budget as a tool to get other actors in the system to do things they would not otherwise do. Currently, the budget preparation is seen as an accounting exercise with the aim to come out with amounts of money needed to pay for things that the education law says has to be done. (Source: World Bank, 2011b)*

170. It was also noted at the time that consultation with MoNE when it came to financial decisions was in need of improvement.

*[T]here is a perception within the Ministry that important education-related decisions are being entrusted into the hands of accountants and economists in the budget directorate who do not have the needed level of expertise in education and do not sufficiently involve the education specialists in the Ministry. And on the side of the economists and accounts, there is frustration that decisions are being made without taking into account (or even trying to estimate) their fiscal implication (ibid).*

171. The World Bank is currently supporting MoNE in an effort to increase the capacity of the Ministry (including through structural reorganization and enhancement of the organizational culture) and make it more task and policy oriented.

*The Teachers' salary scheme needs to be overhauled to attract outstanding candidates*

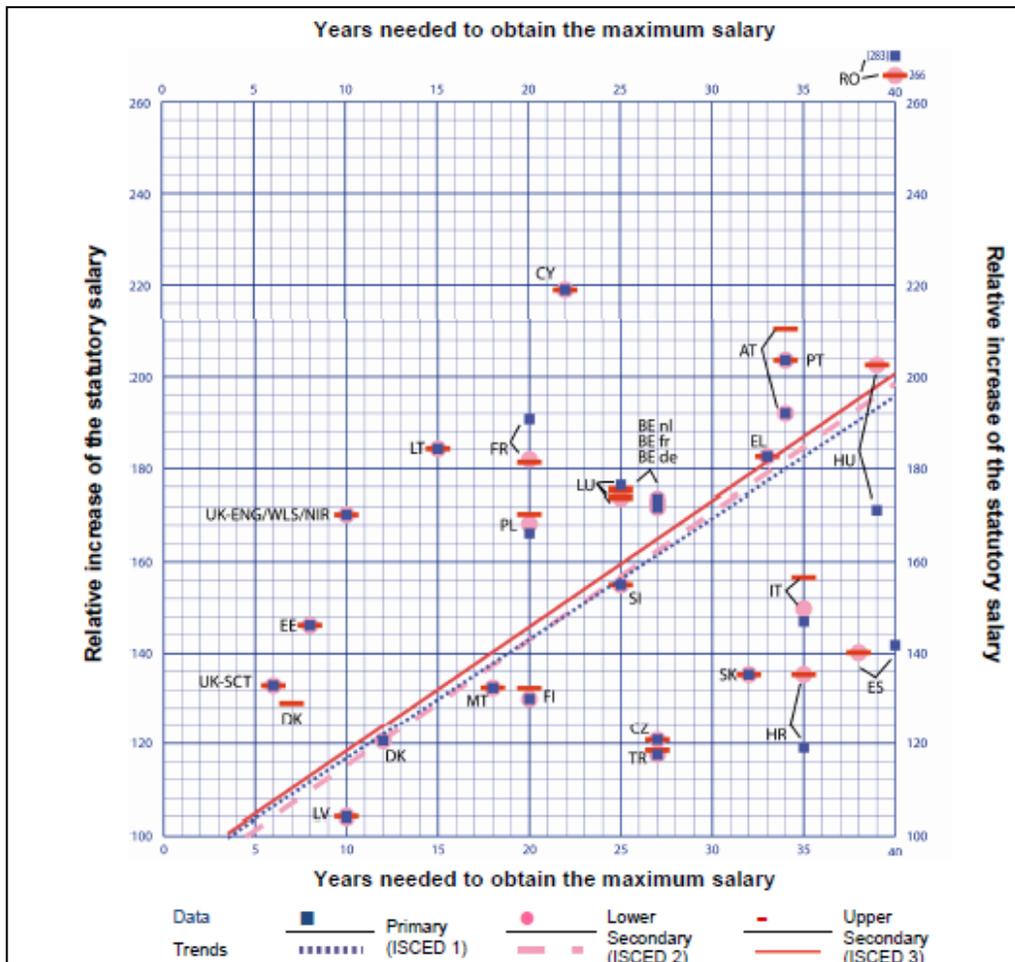
172. **Highly performing education systems in Europe have a comparatively high entrance salary to attract the best into the profession.** The salary increases over a life cycle are often rather moderate in these systems. While the maximum annual gross statutory salaries of full-time fully qualified teachers in public schools in Romania relative to GDP per capita is low, it is not extremely low in comparison with other European countries (see Annex 2 for 2011/12 data).

173. **The minimum (entrance) salary of a teacher in Romania, however, is amongst the lowest in Europe** in comparison (Eurydice, 2012), second only to Latvia, and thus provides little incentive for good candidates to enter the teaching profession. Romania is also an outlier in another respect:

174. **There is no other country in Europe in which the salary increase over the teacher's lifecycle is (potentially) so steep** (starting from an extremely low basis) and **there is no other country in Europe where it takes so many years to reach the highest salary level, namely 40 years.** As Figure 33 shows, Romania is out of step with the rest of Europe with regard to its teacher salary model. Most countries which are performing well on equity and quality dimensions can be found in the lower left quadrant of the figure. However, none of the other European countries, except Cyprus, displays a salary increase relative to the minimum statutory salary of more than 210 percent, while the respective figure of Romania is above 260 percent.

**Policy makers are advised to assess very carefully the incentives that the current Romanian teacher salary model creates.** One could argue that teachers as professionals with a tertiary education degree and potential knowledge of foreign languages and ICT could be easily attracted into other professions or into migrating. However, the motivation for choosing teaching as professional field is unlikely to be entirely extrinsic. At the same time, the current system seems to punish young people for this professional choice. This issue will be further discussed in the general education section that follows.

**Figure 33: Potential salary increases of teachers in Europe**



Source: Eurydice, 2012

### Moving on from the status quo – what are the policy levers?

175. Education systems can be characterized by the *why*, the *what* and the *how* of education in any given country or in other words by what motivates education systems (their inherent philosophy), their outcomes and their inputs and modes of delivery. While the first part of this section has focused on system outputs and the second part on inputs, this section will focus on specific systemic features and modes of delivery while also commenting on some of the more comprehensive features of the Romanian education system. However, before the study moves to this discussion, it will get back to the question of outcomes.

### ***The need to focus on ‘learning outcomes’ – knowledge, skills and competences***

176. The term ‘learning outcomes’ is currently used in two ways in the public European debate: a) in a descriptive manner, i.e. to describe the factual outcomes of learning, for example, through the results of international assessments; and b) in a prescriptive way. The latter is equally important as steering a system without clearly stated objectives is like navigating a ship without a map in uncharted waters. Europe has found a consensus concerning generic knowledge, skills and competences<sup>65</sup> which education systems at different (ISCED<sup>66</sup>) levels are expected to produce and these generic – and prescriptive – learning outcomes are laid down in the European Qualifications Framework for Lifelong Learning (EQF).

*The core of the EQF concerns eight reference levels describing what a learner knows, understands and is able to do – ‘learning outcomes’. Levels of national qualifications will be placed at one of the central reference levels, ranging from basic (Level 1) to advanced (Level 8). This will enable a much easier comparison between national qualifications and should also mean that people do not have to repeat their learning if they move to another country.*

*The EQF applies to all types of education, training and qualifications, from school education to academic, professional and vocational. This approach shifts the focus from the traditional system which emphasizes ‘learning inputs’, such as the length of a learning experience, or type of institution. It also encourages lifelong learning by promoting the validation of non-formal and informal learning.*

Source: European Commission ([http://ec.europa.eu/education/lifelong-learning-policy/eqf\\_en.htm](http://ec.europa.eu/education/lifelong-learning-policy/eqf_en.htm))

177. This shift from an input to an output based approach was an important move for European education systems. As many other European countries, Romania began the development of a National Qualifications Framework (NQF) at the tertiary education level before endowing the National Authority for Qualifications with a wider mandate. While the move towards an NQF with clearly established learning outcomes can be seen as a positive development, the process in some European countries suffers from weaknesses, inter alia: proper balancing of generic and subject-specific (technical) skills for specific professions, the lack of comparable quantitative indicators for vocational training on one hand and tertiary education on the other and finally procedural issues, like the insufficient involvement of employers’ associations and participants from the employers side who have the experience and influence to shape the education system of the future in the best possible way.

### ***Giving children a good and equal start: Early Childhood Development***

178. Early Childhood Development (ECD)<sup>67</sup> is an educational sub-sector which for a long time was not considered a full part of national education systems. The question what to do with young children was rather considered a social question which translated into a ‘care’ concept as

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<sup>65</sup> The first two learning outcomes refer to what a learner knows and is able to do at the end of a period of learning. ‘Competences’ in the context of the European qualifications frameworks refers rather to work attitudes and the way learners and workers interact with each other.

<sup>66</sup> International Standard Classification of Education (<http://www.uis.unesco.org/Education/Pages/international-standard-classification-of-education.aspx>).

<sup>67</sup> For the purpose of this study ECD and Early Childhood Education (ECE) are used synonymously.

opposed to early education. However, **rates of return for investment in early education are highest - as compared to interventions later in life - and have multiple benefits.** This is one of the reasons why the World Bank team has offered to provide technical assistance to the Ministry of National Education (as part of the advisory services to the Romanian Government), which submitted a proposal to the EU PROGRESS facility in February 2013 to carry out a social policy experiment on early childhood education. The program was developed in partnership with OvidiuRo NGO and the Roma Education Fund (see Box 5).

#### **Box 4: Why Invest in Early Child Development (ECD)**

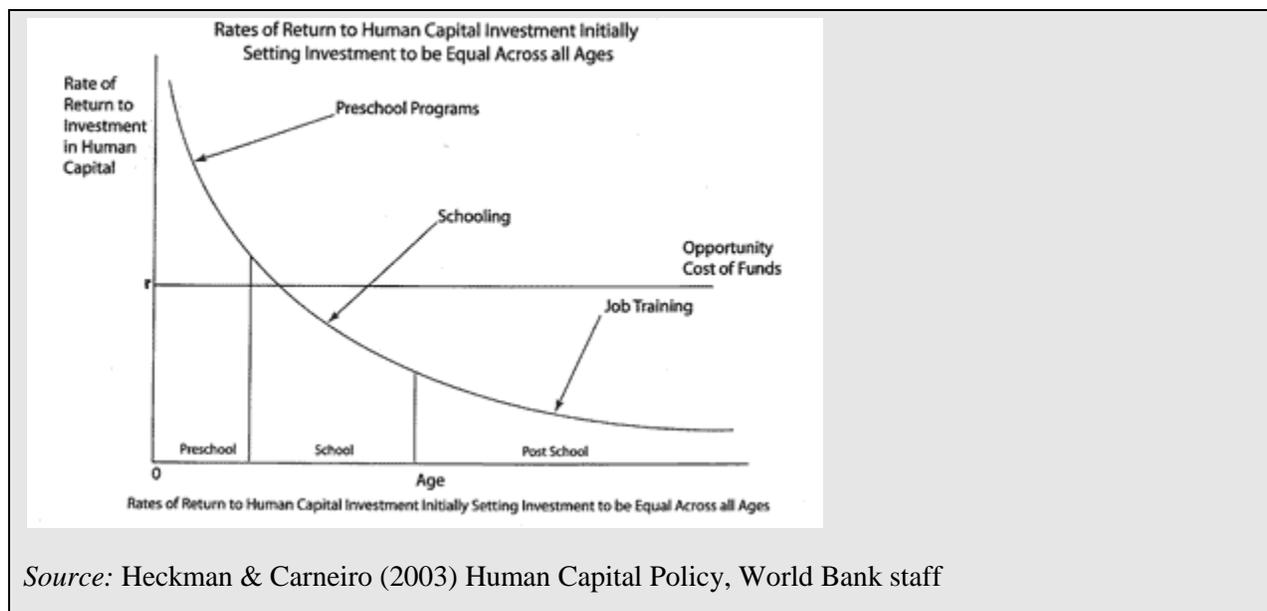
The reasons for investing in Early Child Development (ECD) programs are numerous and interrelated. A child's ability to think, form relationships, and live up to his or her full potential is directly related to the synergistic effect of good health, good nutrition, and appropriate stimulation and interaction with others. A large body of research has proven the importance of early brain development and the need for good health and nutrition.

ECD project research has proven that children who participate in well-conceived ECD programs tend to be more successful in later school, are more competent socially and emotionally, and show higher verbal and intellectual development during early childhood than children who are not enrolled in high quality programs. Ensuring healthy child development, therefore, is an investment in a country's future workforce and capacity to thrive economically and as a society. The benefits of ECD thereby encourage greater social equity, increase the efficacy of other investments, and address the needs of mothers while helping their children. Integrated programs for young children can modify the effects of socioeconomic and gender-related inequities, some of the most entrenched causes of poverty.

- Studies from diverse cultures show that girls enrolled in early childhood programs are better prepared for school and frequently stay in school longer. Early childhood interventions also free older sisters from the task of tending preschoolers, so that they can return to school.
- With ever more mothers working and more households headed by women, safe child care has become a necessity. Providing safe child care allows women the chance to continue their education and learn new skills, thereby addressing the intersecting needs of women and children.

Including early childhood interventions in larger programs can enhance the programs' efficacy. Early childhood interventions in health and nutrition programs increase children's chances of survival. Interventions in education programs prepare children for school, improving their performance and reducing the need for repetition.

A healthy cognitive and emotional development in the early years translates into tangible economic returns. Early interventions yield higher returns as a preventive measure compared with remedial services later in life. Policies that seek to remedy deficits incurred in the early years are much more costly than initial investments in the early years. Nobel Laureate Heckman (1999) argues that investments in children bring a higher rate of return than investments in low-skill adults:



179. **ECD provides a particularly important leverage for at risk and minority students** (see World Bank, 2010 and Figure 43).<sup>68</sup>

**Box 5: Rigorous Impact Evaluation Promoting Preschool Enrolment of Roma Children**

A large body of international evidence underscores the importance of early intervention – from conception to age 8 - for child development and later life outcomes. A recent World Bank report (2012) commissioned by the European Commission highlights that the inequities for Roma start early: “[...] while more than 75% of all children aged 3-6 are in preschool in each of these countries, the large majority of Roma children are not. In Romania 37% of Roma children aged 3-6 are in pre-school.” The report finds that more than 80% of Roma parents wish at least a secondary education for their sons and their daughters. But multiple disadvantages stand in the way of reaching that goal for the vast majority of Roma, especially inequalities early in life.

To increase preschool participation, a project was designed to measure the impact of three complementary approaches. The target group will be 4-5 year old poor Roma children and their poor non-Roma neighbors in rural Romania. The project aims to first sample 180 rural poor communities with many Roma children. These 180 will be randomly assigned to one of four groups:

Group A: the status quo, or comparison group – none of the interventions will be applied, which will enable comparison of preschool enrolment, attendance, and learning and socio-emotional outcomes.

Group B: in Group B communities, the project will focus on parent awareness raising of the benefits of preschool for later life education and other outcomes

<sup>68</sup> The importance of education as a main driver of social inclusion and growth was underscored by a recent visit of the World Bank President, Dr Jim Yong Kim, to Romania: <http://www.worldbank.org/en/news/speech/2013/05/09/world-bank-president-statement-on-europe-day-in-romania>

Group C: in Group C communities, families will receive the same treatment as Group B, PLUS principals, teachers, and social workers will be trained in social inclusion and cultural sensitivity and social workers and Roma mediators will facilitate communication between families and school personnel/local authorities.

Group D: in Group D communities, parents will receive same treatment as Groups B & C, PLUS small additional incentives – small monthly financial assistance or food coupons – provided children regularly attend school.

The randomization will be at the community level, with 45 units in each group. Before randomization, the sample of communities will be stratified using baseline data. All children aged 4-5 in the three communities will be eligible to receive the selected interventions corresponding to A, B, or C, regardless of ethnicity. However, for the evaluation, a sample of 10 children aged 4-5 in each community for a total 1,800 children total will be followed, in addition to information collected from parents, teachers, and municipal stakeholders.

Comparing the preschool and learning outcomes of children in groups B and A will provide the so-called ‘average treatment effect’ and will answer how effective awareness raising is. Comparing C and B will provide the marginal impact of more intensive (and costly) activities aimed at promoting inclusive preschool environments. And, lastly, comparing preschool and learning outcomes between D and C will provide the marginal impact of additional support to poor families conditional on regular attendance. This proposal was submitted for funding to the EU PROGRESS February 2013 call for proposals on social policy experimentation.

180. **Romania has seen a moderate expansion of early childhood provision (ages 3 – 6) in recent years.** The gross enrollment rate of children 3-6 years in preschool has increased from 71.8 percent in 2003/2004 to 78.4 percent in 2011/2012. Discrepancies between rural and urban areas prevail although they decrease every year (from 9 percentage points in 2003/2004 to 4.5 percentage points in 2011/2012). In the school year 2011/2012, this gap increased again by 5.5 percentage points (75.5 % in rural areas vs. 81% in urban areas) highlighting the need for continuous support to increase access to ECD programs in rural areas.

181. For the last two decades, the ECD system included a diverse range of institutions, under different coordination bodies<sup>69</sup> which posed a number of challenges. A consolidation of the ECD sector is now urgently needed.

**Figure 34: Gross enrollment rate in pre-school education in Romania**

	2003/ 2004	2004/ 2005	2005/ 2006	2006/ 2007	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011	2011 /2012
<b>Total</b>	71,8	73,0	74,7	76,2	77,6	77,8	78,4	78,8	78,4
<b>Urban</b>	76,9	77,8	79,6	79,3	81,8	81,3	80,7	80,9	81,0
<b>Rural</b>	67,9	68,8	70,5	73,4	73,7	74,4	76,0	76,6	75,5
<b>Girls</b>	72,6	73,6	75,3	76,8	78,0	78,3	78,7	79,1	78,8
<b>Boys</b>	71,1	72,4	74,3	75,7	77,2	77,3	78,1	78,5	78,0

<sup>69</sup> Day care centers for children at risk (0-6 yr.) coordinated by county directorates for child social assistance and protection/local authorities, kindergartens with crèches (0-6yr.) coordinated by the Ministry of Education, kindergartens (3-6/7yr.) coordinated by the MOE, crèches (4mo.-3/4 yr.) coordinated by local authorities, day care centers or private kindergartens (0-6yr.) approved by MoNE.

182. Early childhood education for the youngest is of major importance for a couple of reasons:

- to lay the **foundation for lifelong learning** (establish a culture of learning and self-improvement),
- **to proactively address social and educational issues**, especially from excluded communities and lower socio-economic groups and
- **to allow young mothers to work, if they desire to do so.**

183. **However, ECD for the 0 to 3 year olds is basically non-existent in Romania.** There is no clear responsibility for the education of children of 0-3 years and a rather limited number of crèches (a total of 303 enrolling 16,587 children in total) for a European country of 19 million inhabitants. The ECD institutions for this sub-sector are run by local authorities and are seen only as “care” institutions without any “education” concept and input.

184. Some barriers impeding access to and expansion of ECD services include:

- Lack of space: there are 12,197 kindergartens with 95,7% occupancy rate and 303 creches with 16,587 children under 3 years enrolled;
- Lack of qualified staff in kindergartens (3-6 years), especially in isolated communities; as well as in creches (0-3 years)
- Isolated communities; distance from home and kindergarten/day care/creches;
- Socio-economic disadvantages (low income of parents, parents at work outside the country, single parent, children used for housekeeping and other works, lack of facilities at home, etc.)
- Language barriers (especially for Roma children)
- Lack of Adequate Provision for Special Education Needs (SEN)

**Recommendation 3:** Leverage European Structural Funds to move towards universal kindergarten education (3 – 6 years) and develop conditions to massively increase expansion of provision for the youngest (0 – 3 years). With regard to disadvantaged (in particular Roma) communities, scale up initial ECD work under the World Bank’s Social Inclusion Project and other ECD interventions whose impact has been established (see Box 5 and 6).

**Box 6: Start early - An Open Letter to the Citizens of the European Union, including Romanians**

Imagine there were a virus spreading across Europe that severely impeded young children's intellectual and physical development. The disease was so debilitating that children afflicted by it could never hold responsible jobs or be productive members of society. They would have to be cared for by the state for life.

And what if the children who were most susceptible were the fastest growing segment of society? There was no cure for this disease, once contracted, but there was a vaccine to prevent it. How would such a crisis be dealt with by the European Union and its member states?

This is the current situation of children of Roma descent throughout the EU. The disease is Lack of Education. The antidote is high-quality early education. It is an established fact that children's brains do not develop as they should in deprived environments. Study after study has shown that early education reduces “*the probability of children being retained in a grade, needing special education,*

*dropping out of school, being unemployed, and being incarcerated*<sup>[1]</sup>.”

[...] Instead of playing the blame game, EU member states should be actively registering for preschool all Roma children residing in their country. A strategy well worth considering is one that is currently being implemented with American dollars in 20 Romanian communities. It's simple: The local authorities register every child between the age of 4 and 6 (next year it will be 3-6) in preschool and provide appropriate clothes and other essentials on an as-needed basis. Parents under the poverty line receive 12 euros a month in food coupons if their children have perfect attendance. Registrations and attendance have increased dramatically in the communities where this strategy is being applied.

Economic analyses have demonstrated that the money invested in quality early education yields a rate of return from three to ten times the original investment<sup>[2]</sup>. The World Bank estimated [...] that one billion euros a year is lost in productivity and tax revenues as a result of the unemployment and under-employment of the Roma – in Romania alone; across the continent the estimate runs to over five billion. This can't possibly be reversed unless EU member states address the Roma education gap with the same conviction and resolve they would a lethal disease.

[1] Linda Darling-Hammond, *The Flat World and Education*, p.34. NY, Teachers College Press, 2010.

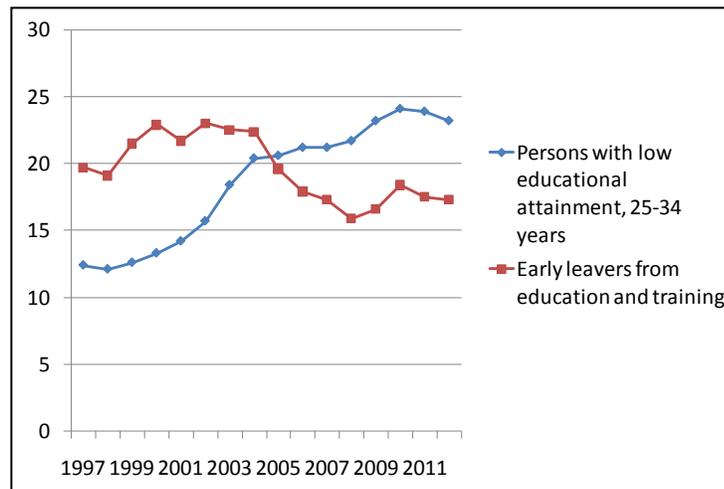
[2] Reynolds & Temple, “Economic returns of investments in preschool education” in Zigler, Gilliam & Jones *A Vision for Universal Pre-school Education* (pp.37-68) NY, Cambridge University Press 2006.

*Source: Leslie Hawke, Founder of Ovidiu Rom, a Romanian NGO in: The Economist, 13 September 2010*

### ***Reforming the school system – or maybe rather not? From ‘Poster-Reforms’ to continuous improvements***

185. **If continuous change translated into continuous improvements, Romania would have the best education system in the world.** Over the past two decades Romania had close to 20 different Education Ministers, with each Minister taking on the role under high public scrutiny and pressure with the expectation of finally implementing long anticipated improvements. Such framework conditions make improvements very difficult and perhaps impossible, i) because somebody pays the price for these changes - those who ‘make education happen’, namely teachers and students (and to some extent also the students’ parents) and ii) many policies only bear fruit in the medium or longer term.

**Figure 35: Decreasing number of early school leavers need 10 years to translate into decreased ‘young persons with low educational attainment’,<sup>70</sup>**



Source: Eurostat, World Bank staff

186. **The current sector leadership seems determined to keep the system on a steady course.** While stability seems very important after the numerous changes mentioned above, this is a difficult undertaking in terms of political economy given that the public expects miracles after the negative messages considered earlier, and students and their parents rightly demand quality education. However, it might well be the only option to regain the trust of what most likely is a deeply disturbed teaching profession, as will be discussed later on.
187. **First, Romania developed an education strategy in 2008<sup>71</sup> <sup>72</sup> which focuses on holistic sector reform and contains many important elements of a modern education system.<sup>73</sup>** This strategy was prepared by a Presidential Commission, based on sector consultations. Problems mapped out in the initial part of this section were acknowledged at the time and some clear and measureable goals for improvement were established including some extremely ambitious targets (e.g. ‘bring early school leaver rate to under 5 percent from its current 23.5 percent’) as well as envisaged steps for achieving them.
188. **The education strategy provided an important input into the 2011 Education Reform Law. The law foresees a range of structural changes, including the integration of class 9 into lower secondary education.** In principle, this appears as a positive step. Poland made a similar move following its 1999 Education Reform – in combination with a learning outcomes based approach – and the combination of these two factors significantly contributed to jumpstarting

<sup>70</sup> In addition, developments outside the education system are likely to impact on these developments: Even if the number of early school leavers decreases substantially, the number of young persons (25 – 34) might stagnate if a larger proportion of highly qualified migrates.

<sup>71</sup> ‘Education and Research for the Knowledge Economy’, 2008

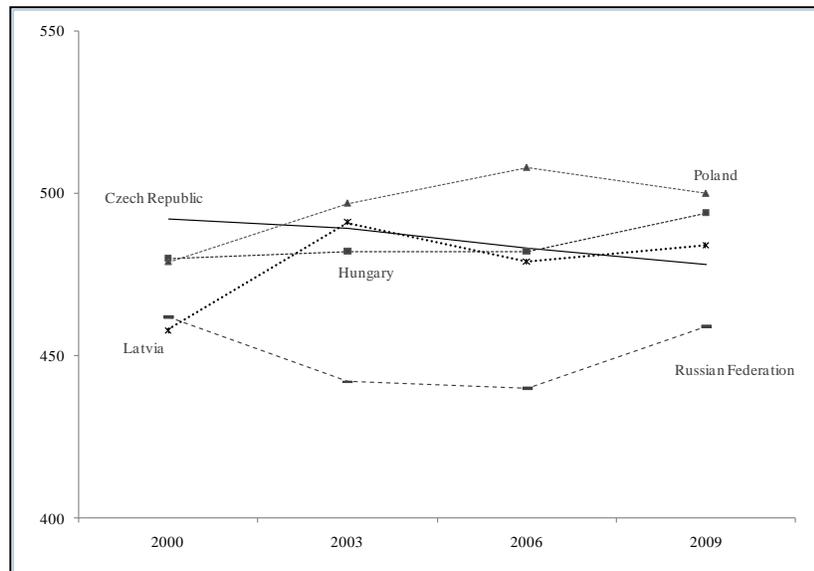
<sup>72</sup> For general features of the Romanian education system, see:

<https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Romania:Overview>

<sup>73</sup> See European Commission 2010a ‘Adapt curricula content, teaching, delivery methods and assessment to the intended learning outcomes’.

Poland's PISA performance and put Poland ahead of all other Central and Eastern European countries<sup>74</sup> (see Figure 36 and Jakubowski & Patrinos (2010))

**Figure 36: Poland's PISA performance following the 1999 education reform**



Source: OECD, PISA data; Jakubowski & Patrinos (2010); Arnhold and Kwiek (2011)

189. **However, it seems that when the law was developed and adopted, preconditions and the impact of certain policies were not sufficiently analyzed.** This can be well illustrated with regard to the debate on the integration of grade 9. While it has been acknowledged that this would be a positive move in principle, the current sector leadership pointed at the fact that the physical infrastructure for this change is not in place and cannot be created overnight. The same applies to some other measures proposed by the 2011 law.
190. **This points at an important structural weakness of the Romanian education system which became increasingly apparent in recent years: policies have been announced without fully assessing their impact** and without ensuring that preconditions to make them a success are met.<sup>75</sup>
191. Further, the 2011 law defines qualification levels for the teaching profession, making access and professional advancement much more selective. In principle, aiming at the enhancement of professional competences for teachers based on clearly defined learning outcomes is a worthwhile undertaking (see Box 7):

**Box 7: New sets of teaching competences**

The teaching professions now face rapidly changing demands, which require a new set of competences. Helping all learners to develop the competences they need in a rapidly evolving

<sup>74</sup> Students still jointly attended general (lower secondary) education at the age of 15 after this change. The improvement of PISA performance indicates lower quality of VET which does not seem to transmit the type of problem-solving skills tested in PISA.

<sup>75</sup> In some cases a phased approach would make sense, e.g. higher professional requirements for new teachers while others 'grow out' of the system'; this, however, would require a medium to long term planning horizon.

society, and a global labor market based on ever higher skill levels, requires new sets of competences...

[T]he recent World Summit on Teaching noted that teachers need to help students acquire not only “*the skills that are easiest to teach and easiest to test*” but more importantly, ways of thinking (creativity, critical thinking, problem-solving, decision-making and learning); ways of working (communication and collaboration); tools for working (including information and communications technologies); and skills around citizenship, life and career and personal and social responsibility for success in modern democracies”.

When many teaching staff undertook their initial education, knowledge about learning and teaching was less developed, many teaching tools were not available and the role of education and training was more narrowly conceived. For example, the increased availability of educational resources via the worldwide web (Open Educational Resources) means that both teaching staff and learners have, potentially, a much wider range of learning materials at their disposal. Research into the impact of this phenomenon on the quality of learning is not as yet available; however, teaching staff will increasingly need the competences to find, evaluate and deploy learning materials from a wider range of sources, and to help learners acquire these competences. The availability of OER may also change the nature of the teaching-learning activity itself, with self-directed learners able to take more control over their learning.

So teaching staff nowadays also need the competences needed to constantly innovate and adapt; this includes having critical, evidence-based attitudes, enabling them to respond to students’ outcomes, new evidence from inside and outside the classroom, and professional dialogue, in order to adapt their own practices.

Teaching competences are thus complex combinations of knowledge, skills, understanding, values and attitudes, leading to effective action in situation. Since teaching is much more than a task, and involves values or assumptions concerning education, learning and society, the concept of teacher competences is likely to resonate differently in different national contexts.

This range and complexity of competences required for teaching in the 21st century is so great that any one individual is unlikely to have them all, nor to have developed them all to the same high degree. Attention must therefore be focused also on the competences or attributes of an education system or of a teaching team. This, again, highlights two essential facts:

1. effective teaching must be collaborative, collegial; in some Member States, and in many educational institutions, this will require significant changes; and
2. even the best teachers cannot be fully effective if they work in a team or an education system that lacks some of the essential competences.

*Source:* Commission Staff Working Document: Supporting the Teaching Professions for Better Learning Outcomes. Accompanying the document ‘Communication from the Commission - Rethinking Education: Investing in skills for better socio-economic outcomes’, 2012

192. However, as indicated earlier, **teachers had to carry the main burden of rapid and often conflicting changes over the last two decades.** At the time when the law was implemented with its move towards a competences based approach - requiring major and ambitious changes in teaching practice - and the law’s implications for access and advancement of teachers, teacher salaries were cut by 25 percent (as for other public employees) leading to a drastic deterioration

of the socio-economic status of teachers and their public perception. Further, the consolidation of the school network is likely to have required adjustments from many teachers.

### **Box 8: Thousands of Romanian teachers protest wage cuts**

About 5,000 Romanian teachers and education employees protested Tuesday in the capital over austerity measures implemented by the government to trim the budget deficit amid a deep recession.

They demanded decent salaries, more investment in education and an end to layoffs. "We are humiliated," said 34-year-old Elisabeta Cozma, a primary school teacher from Marghita, a small town in northwest Romania, saying she wanted "the dignity of teachers restored." Cozma said a new salary law means teachers earn less. "My salary now is 1,000 lei (\$330). It used to be 1,500 lei (\$495)." [...] It was the latest in a series of angry demonstrations since the government cut wages in the public sector by 25 percent in July to keep the budget deficit at 6.8 percent.

*Source:* Murray, A. W. (2010)

193. The authors of this report conducted a focus group interview with employers from different industries to discuss their observations of skills demand and supply issues in Romania and expectations vis-à-vis the education system. The authors asked employers<sup>76</sup>, if they could change one thing about the education sector in Romania what would this be, and most of them replied that they would focus on teachers. Many of the employers made reference to their difficult situation.
194. **No education reform or significant improvement of the sector will be achieved without teachers.** Policy makers are advised to learn from the best performing European countries with regard to the respect this profession receives in these countries. As one of the employers noted, *'respect and appreciation does not cost you a single Leu'*.
195. **There are issues around the capacity of the Romanian teaching force<sup>77</sup>, however, the answer is not a punitive culture but one which helps improving the entire education systems** as will be discussed later.

*In the successful countries there is a belief that universal quality education is crucial to their future [...]. These countries approach the task with the knowledge that everyone must be part of the solution.*

*The successful systems have come to trust and respect teachers. If you don't have trust how do you get it? To break the cycle of distrust you have to respect others 'before they have earned the right to be respected' and then build competencies and trust over time. [...]*

<sup>76</sup> Other outcomes of the focus groups with employers are presented in the employment section.

<sup>77</sup> <http://www.romania-insider.com/only-3-in-10-teachers-in-romania-get-grade-above-7-for-permanent-teaching-job/28694/>

*If the teaching force has low capacity more directive support will be required at the beginning; not heavy-handed accountability but direct development of teachers through professional learning of effective instructional practice. As teacher and leader capacity become stronger, peers become the greater driving force.*

Source: Fullan (2011)

**Recommendation 4.** Build a structure for evidence-based policy making at the Ministry, including a data warehouse. Gain a better understanding of what’s going on in the classroom by using research instruments as classroom observations. In terms of accountability, focus on school value added and provide incentives for and acknowledgement of teachers working under particularly difficult circumstances.

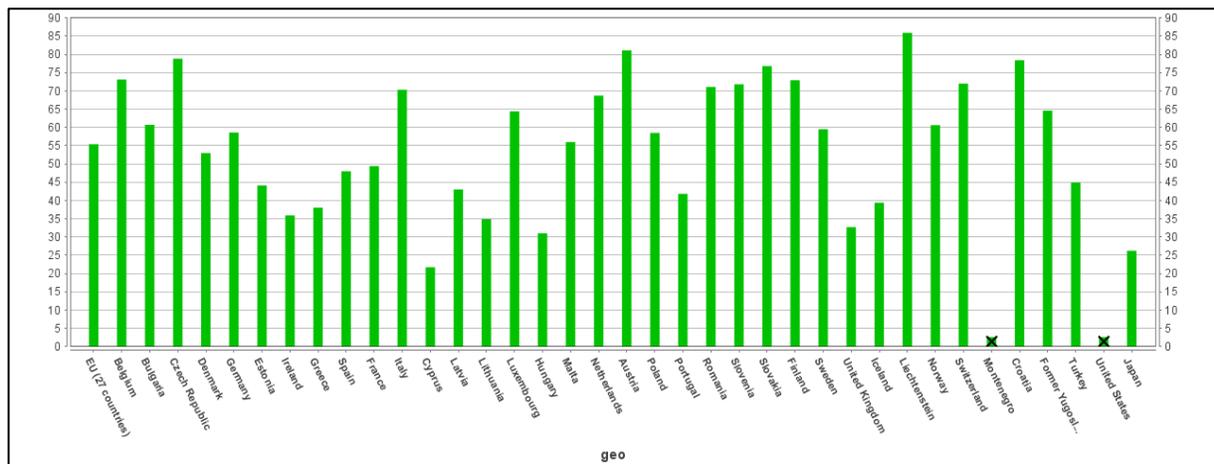
**Recommendation 5.** Put the entire teaching force at the center of future change efforts. Reconsider the current salary model and use of ESF for development of the teaching force (school-based continuous professional development for teachers and training and support for principals). Support Roma teaching assistants through professional development.

**Recommendation 6.** Benchmark Romanian teacher policies internationally, for example through SABER, the World Bank’s System Assessment and Benchmarking for Education Results.

*Vocational training: Not technical or generic skills – students need both*

196. Romania belongs to the European countries with a **high share of upper secondary students in vocational training (70 percent).**

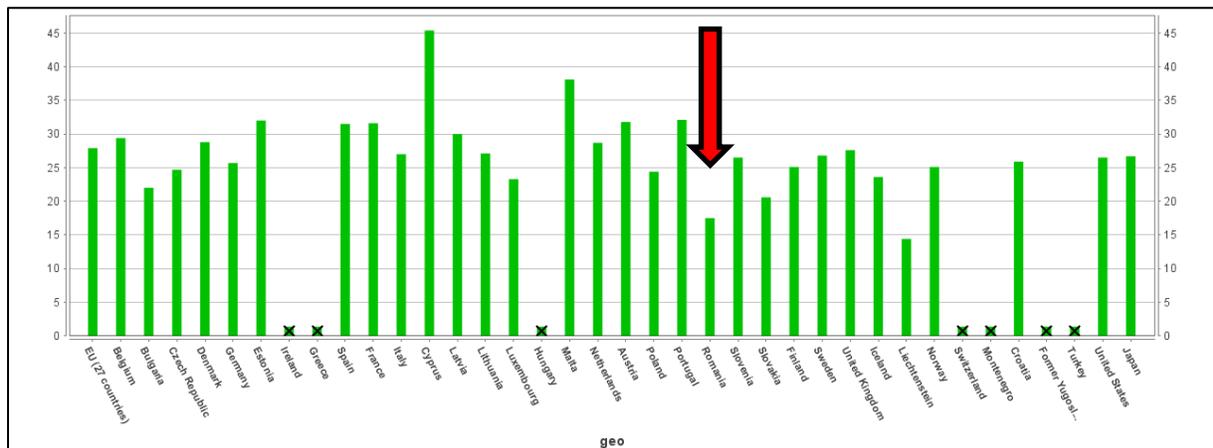
**Figure 37: High percentage of students in VET at the secondary education level**



Source: Eurostat, World Bank

197. **At the same time, funding for secondary education is particularly low in Romania.** As Figure 38 shows Romania is second lowest, only ahead of Liechtenstein, with features resulting from its size and industry structure.

**Figure 38: Funding levels for secondary education**



Source: Eurostat, World Bank

Note: Annual expenditure on public and private educational institutions per pupil compared to GDP per capita, at secondary level of education (ISCED 2-4), based on full-time equivalents

198. Most VET systems in Europe face a multitude of issues, including:

- While technical skills are (also) sought by firms, higher level generic skills (acquired through tertiary education) provide higher rates of return overall.
- Quality of VET is often low, equipment outdated and the training lacks relevance and practical applicability.
- While employers demand good quality VET, they are not always willing to engage in making VET more relevant.
- There is an equity issue as students from lower economic strata are often channeled into VET.<sup>78</sup>
- VET often leads to dead ends with little scope for further learning.
- VET has a problematic reputation.

199. Romania, like some other Eastern European countries, tries to mitigate the last point by giving 4-year VET students access to the Bacalaureate exam and thereby, in principle, the possibility of accessing tertiary education. However, the main share of those failing the Bacalaureate exam come from 4-year VET schools.

200. **VET in Romania appears to face two problems:** it does not provide the high quality **technical skills** which would make it attractive for students to directly enter the labor market<sup>79</sup> and at the same time it does not provide a good level of **generic skills** which would give the majority of VET students a sound starting point for higher forms of learning. According to a 2012 report<sup>80</sup> by the UK's City & Guilds Centre for Skills Development, VET seeks six outcomes:

- Routine expertise: Mastery of everyday working procedures in the domain

<sup>78</sup> See for example: ETF Country Report, Vocational Training against Social Exclusion. Romania

<sup>79</sup> The issue of lack of relevance of technical training also came up in focus group interviews with employers. See also Annex 1 (orange highlights) – in contrast to the higher order skills provided through tertiary education, students from traditional vocational professions are in danger of being unemployed after graduation from VET institutions.

<sup>80</sup> Lucas, Spencer, and Claxton (2012).

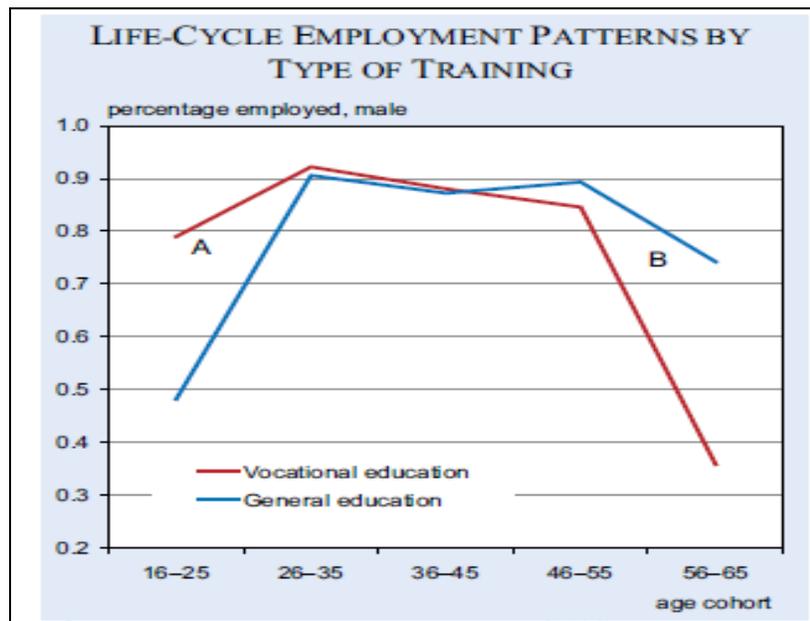
- Resourcefulness: The knowledge and aptitude to think through problems effectively when necessary
- Functional literacies
- Craftsmanship: An attitude of pride and care for the job
- Business-like attitude: Understanding the economic and social sides of work
- Wider skills for growth: An inquisitive and resilient attitude; constant search for improvement

201. Interestingly, while technical skills and ‘craftsmanship’ do play a role in terms of desired outcomes, a strong emphasis is put on generic skills and competences like resourcefulness and business-like attitude, and in particular generic skills.

202. It would be advisable to assess to what extent the current VET set-up in Romania generates such generic and vocational outcomes and also if the high percentage of learners in VET serves the country’s best economic interest.

203. **The main purpose of secondary education is to provide students with a strong foundation of generic skills and to enable them to upgrade their skills over an entire life-cycle.** This will be imperative at a time of demographic change. Only if these skills are provided, will it be possible to keep VET graduates in the work-force over a longer life-cycle (see Figure 39) for typical life-cycle patterns of employment by type of training).

**Figure 39: Life-cycle employment patterns by type of training**



Source: Hanushek, Woessmann and Zhang (2011).

204. As discussed in the employment section, **successful VET systems emphasize both, a strong foundation of generic and relevant technical skills,** giving students the necessary flexibility to navigate their learning and working careers in an evolving labor market in which they are likely to participate for many decades. This seems more important than potentially fruitless skills

forecasts which might display similar features to labor force planning. A recent World Bank note (2012, unpublished) on Reforming Technical and Vocational Education and Training advises:

- Diversify only after students have demonstrated the acquisition of strong basic skills (reading, writing, numeracy).
- If diversifying in secondary education, provide competencies for work that are broad, allowing for exploration, flexibility and readiness for in-depth training.

205. Accordingly, one of the priorities for VET which the European Training Foundation identified in its 2011 Torino Declaration is “*providing an integrated, lifelong learning approach to education and training*” which will, inter alia, require the public sector to cooperate more successfully with private providers than this has been the case in the past.

*Use financing and transparency tools to reach strategic targets in higher education*

206. **Romania has a large<sup>81</sup> but not necessarily a very diversified higher education system.** Recent attempts to classify higher education institutions into research, research/teaching and teaching<sup>82</sup> intensive (following the 2011 legislative change) have met with some resentment and the outcomes of this undertaking still need to be evaluated. The classification is accompanied by a program ranking based on teaching quality, research, labor market insertion and management practice.

207. **The question is if this type of classification will lead to desired outcomes** (e.g. increased research activities and more academic excellence) regarding the overall system or only reinforce an existing division and a tendency towards academic drift. An alternative approach would be to put more emphasis on a high quality polytechnic/*Fachhochschul* sector with a strong emphasis on applied research and regional development.

208. It is further worth noting that other European countries have de-coupled evaluations and rankings (the latter normally being provided by the private sector). They have also increasingly abolished program-based evaluation and accreditation for practical reasons but also as a more systemic approach to quality assurance focusing on the entire Higher Education Institution (HEI) seems more appropriate. And, this would be most likely be the unit at which internal quality assurance is provided.

209. Romania scored well in the last Bologna stocktaking (<http://www.ehea.info/>) with the remaining to do's only in terms of full establishment and implementation of the National Qualifications Framework, levels of international participation in quality assurance and full implementation of, the European Credit Transfer and Accumulation System (ECTS). However, there are indications that the internationalization of Romanian universities is still a challenge.

210. **The number of persons with a tertiary education degree in the 30 – 34 years age cohort has significantly increased over the last 10 years** (from 8.9 percent in 2003 to 21.6 percent in 2012<sup>83</sup>) and is expected to increase further, in accordance with higher enrolment rates in recent

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<sup>81</sup> [http://erawatch.jrc.ec.europa.eu/erawatch/opencms/information/country\\_pages/ro/country?section=ResearchPerformers&subsection=HigherEducationInstitutions](http://erawatch.jrc.ec.europa.eu/erawatch/opencms/information/country_pages/ro/country?section=ResearchPerformers&subsection=HigherEducationInstitutions)

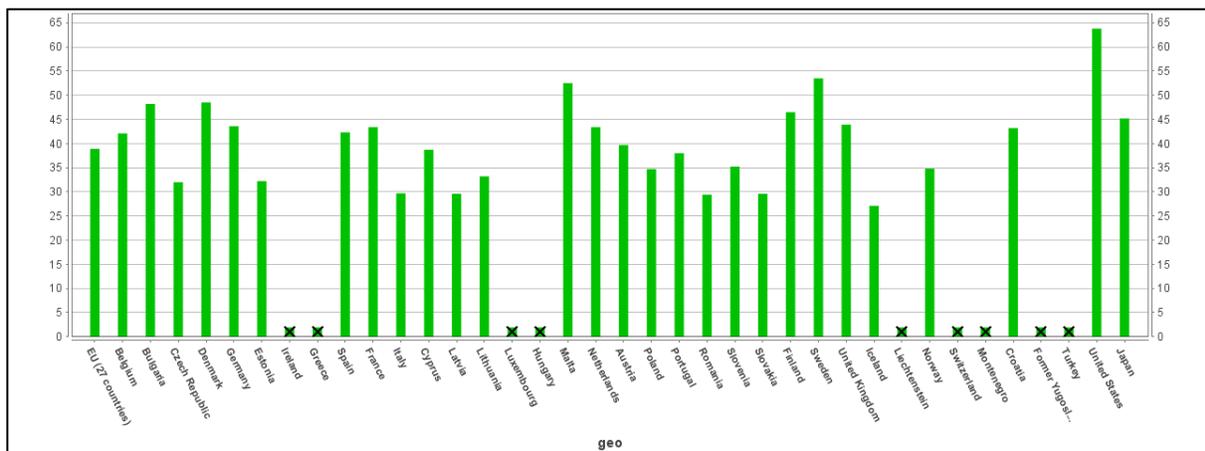
<sup>82</sup> It seems that all private HEIs are put in this category, independent of the outcome of their ranking. Over 40 percent of all students in Romania graduate from private HEIs (for the latter: World Bank, 2011c).

<sup>83</sup> Source: Eurostat.

years. The labor market continues to reward tertiary level education and there is still a sizeable wage gap as has been discussed in the employment section; so studying for a tertiary degree is still an economically smart choice for young people in Romania.

211. **The overall funding level for tertiary education is low** but comparable to some other European countries (Figure 40). Funding is partially allocated according to a **per-capita-based approach** which, to some extent, has performance-based components. It would be useful for future research to investigate how comprehensive these performance-based components are and if they are effectively used for system steering through financing.

**Figure 40: Annual expenditure on public and private educational institutions compared to GDP per capita**



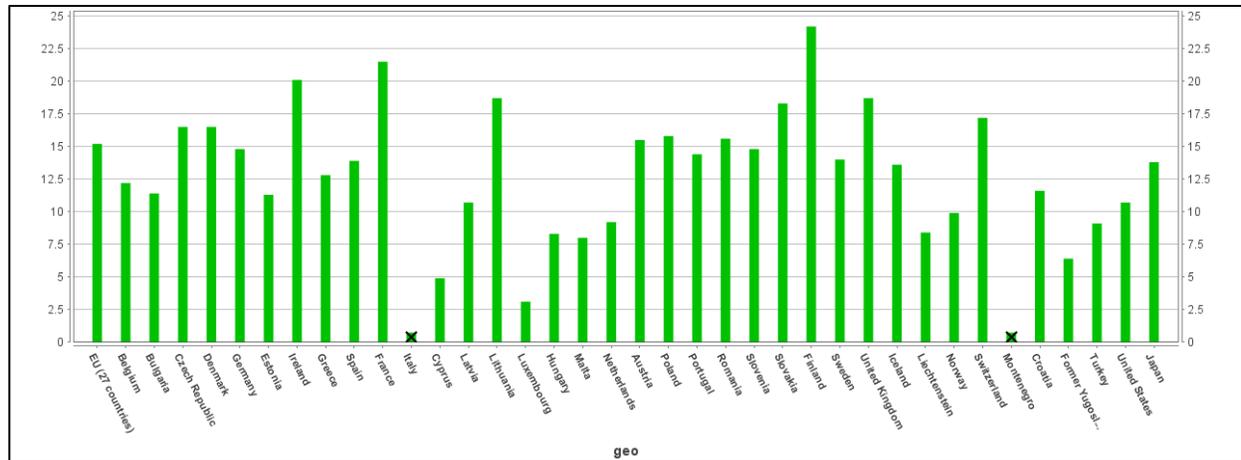
Source: Eurostat

212. **Given the low levels of funding for tertiary education, the system needs to provide the right incentives through funding.** If it is a declared policy goal that access to tertiary education should be further expanded, providing particular support to students from lower economic backgrounds, a means-based system of tuition fee exemption/grants might be more appropriate compared to a merit based one. The latter, even if not primarily intended, supports students from better off backgrounds.
213. **A revamped cost-sharing system could be accompanied by a comprehensive and income-contingent loans scheme<sup>84</sup>.** This, however, would require strong cooperation at the European level with a view to migration patterns of graduates and necessity of cost recovery.
214. The system faces quality and accountability issues (see Functional Review 2); however, recent years have seen significant progress in increasing transparency at the system level, inter alia through the introduction of tracer studies (see UEFISCDI website: [www.uefiscdi.gov.ro](http://www.uefiscdi.gov.ro)). It would be worthwhile to scale up this experience and to roll out graduate tracing and provide information on labor market insertion of graduates for all higher education institutions.

<sup>84</sup> For a full discussion, see World Bank & MERY (2008).

215. In addition, the Functional Review 2 highlights the importance of adequately and independently assessing students learning results at the tertiary level, e.g. through OECD's AHELO<sup>85</sup> which is currently under development.

**Figure 41: STEM<sup>86</sup> graduates (per 1000 of population, age 20 – 29)**



Source: Eurostat

216. The number of STEM graduates in Romania is comparable to other Central and Eastern European countries and has seen some fluctuation over recent years (from 11.9 percent in 2007 up to 20 percent in 2009 and then down to 15.6 percent in 2010). A closer investigation of underlying reasons for this fluctuation would be required, including possible links to migration patterns. In addition, it would be useful to closely investigate the root causes of low innovation activity in Romania. However, this goes beyond the scope of this study.

217. **Another area which deserves further discussion is the impact of demographic developments on the higher education sector.** This would need to include quantitative implications as well as a consideration of the changing role of higher education institutions, e.g. with a view to potential provision of adult learning opportunities.

**Recommendation 7.** Use ESF to scale up tracer studies and make them mandatory for the entire higher education sector while providing appropriate support for their implementation.

*Moving adult learning out of the shade – and preparing children for learning later in life*

218. **Participation in adult learning is very low in Romania** (see Figure 42) and as in other Central and Eastern European countries shows a strong rural-urban divide. A close investigation of the reasons is beyond the scope of this study. However, contributing factors could include the following:

- The formal system does not provide the skills needed to *proactively* access learning opportunities over the life-cycle
- Structural and financing issues (lack of adequate provision)

<sup>85</sup> Assessment of Higher Education Learning Outcomes.

<sup>86</sup> Science, technology, engineering, mathematics,

- Information shortages (concerning learning offers but also returns on further learning)
- Lack of incentives (e.g. tax incentive) schemes for both, individuals and firms

219. **Access to information is a key driver of training decisions, yet it is limited for the least skilled.** This situation has prompted OECD to note that ‘the learning rich get richer’ (OECD, 2010) or expressed differently: the better skilled further accumulate knowledge, skills and competencies throughout their lifecycle – as the generic skills (in particular the ability to ‘learn how to learn’) acquired through formal education allows them to do so.

220. Adult education provides opportunities for re- and up-skilling on the one hand and second chances and possibilities to mitigate shortcomings of a previous learning career on the other. However, the **strongest determinant for a successful lifelong learning career is proper skills acquisition early on through ECD and formal schooling.** The most successful experience with adult education in Europe stems from countries like Denmark which also have strongly performing formal education system.

221. Adult education can be advanced through structural and policy measures (policy coordination, regulation of quality, government investment) and through appropriate information and incentive systems. In particular ‘activation’, i.e. bringing the unemployed back into the labor market, needs a coherent government approach. Policy makers can find good practice examples for adult learning in Europe and beyond (Denmark, US) and Romania might want to study more closely the experience of these countries and seek support from international partners in enhancing the approach to adult learning.

222. The Country Report on Adult Education in Romania<sup>87</sup> features a second chance intervention for adults who did not achieve basic levels of school education in the early 2000s: ‘Center Education 2000+’. It focused on young adults between 14 – 25 years (and in particular Roma) who did not complete compulsory education. They were offered a ‘basic education recovery’ program in parallel with an apprenticeship type of training.

223. It would be advisable to consequently measure the impact of such interventions to draw conclusions on which interventions are worth scaling up, inter alia through European Structural Funds.

#### **Box 9: Does adult education improve labor market outcomes?**

Empirically, little is known about how of adult education affects the labor market. Comparisons of labor market outcomes between those with adult education and those without generally suffer from selection bias: people who choose to undertake adult education are different in unobservable ways from those who do not (e.g., those undertaking adult education are more motivated).

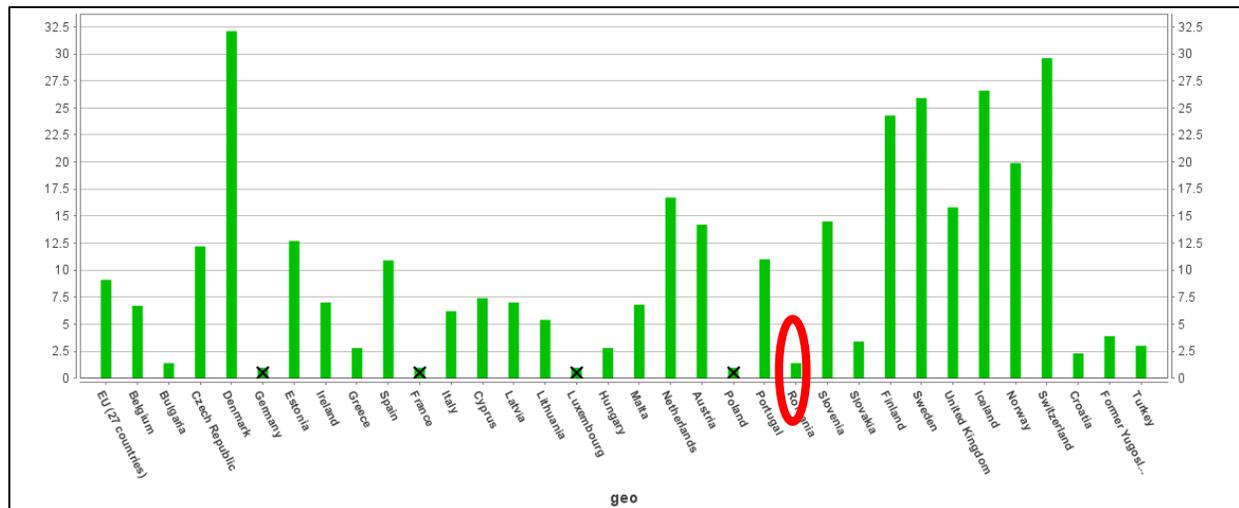
A recent Swiss social policy experiment overcame this selection bias by randomly assigning adult education vouchers to 2,437 adults and comparing the outcomes with those for people who had the same characteristics but did not receive the voucher. Of the 2,437 voucher recipients, 449 (18.4 percent) redeemed the vouchers. The study found that adult education may benefit some subgroups but not others. More-educated people were more likely to use the voucher than less-

<sup>87</sup> European Association for the Education of Adults (2011)

lower educated people. The vouchers did not benefit the labor market outcomes for the more educated but did seem to benefit the outcomes for people who had vocational training backgrounds. More such experiments are needed to build the empirical evidence base.

Source: Schwerdt, G., D. Messer, L. Woessmann, and S. Wolter. (2011)

**Figure 42: Participation in adult learning**

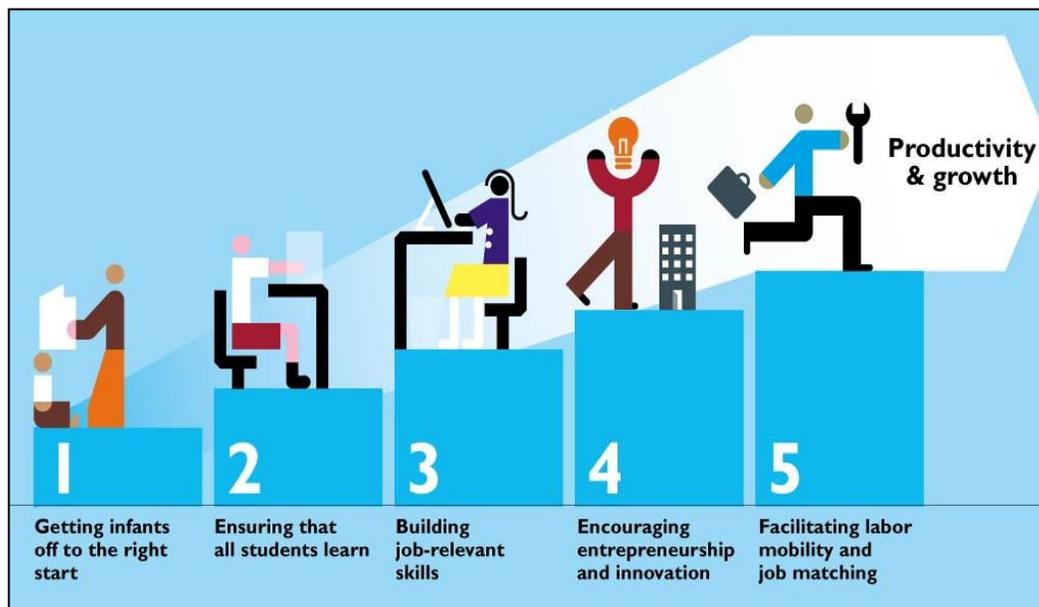


Source: Eurostat

## A system of lifelong learning and continuous improvements

224. Lifelong learning is still too often mistaken for adult education. However, **lifelong learning refers to an overarching life-cycle approach to learning which supports customized learning for every stage of human development.** This is illustrated by Figure 43 which summarizes the World Bank's STEP approach (World Bank (2010)). STEP supports skills development for more jobs and higher productivity. However, it also highlights the importance of higher order skills for human and social development more broadly.

**Figure 43: STEP approach**



Source: World Bank (2010)

The five main steps of the framework are:

*Step 1. Getting children off to the right start*—by developing the technical, cognitive, and behavioral skills conducive to high productivity and flexibility in the work environment through early child development (ECD), emphasizing nutrition, stimulation, and basic cognitive skills. Research shows that the handicaps built early in life are difficult if not impossible to remedy later in life and that effective ECD programs can have a very high payoff.

*Step 2. Ensuring that all students learn*—by building stronger systems with clear learning standards, good teachers, adequate resources, and a proper regulatory environment. Lessons from research and ground experience indicate that key decisions about education systems involve how much autonomy to allow and to whom, accountability from whom and for what, and how to assess performance and results.

*Step 3. Building job-relevant skills that employers demand*—by developing the right incentive framework for both pre-employment and on-the-job training programs and institutions (including higher education). There is accumulating experience showing how public and private efforts can be combined to achieve more relevant and responsive training systems.

*Step 4. Encouraging entrepreneurship and innovation*— by creating an environment that encourages investments in knowledge and creativity. Emerging evidence shows this demands innovation-specific skills (which can be built starting early in life) and investments to help connecting people with ideas (say, through collaboration between universities and private companies) as well as risk management tools that facilitate innovation.

*Step 5. Matching the supply of skills with the demand*—by moving toward more flexible, efficient, and secure labor markets. Avoiding rigid job protection regulations while strengthening income protection systems, complemented by efforts to provide information and intermediation services to workers and firms, is the final complementary step transforming skills into actual employment and productivity.

Source: World Bank (2010)

225. With its emphasis on early learning and equal access, STEP could provide a useful reference framework for the further development of the Romanian education and training system.

226. **Individuals need to learn over their life-cycle; however, also the best education systems are striving for continuous improvement.** The influential McKinsey (2012) report on ‘How the world’s most improved school systems keep getting better’ highlights that it is possible to start the journey of continuous and lasting improvements at every single point (see Annex 3 – example Louisiana).

227. The study discusses interventions chosen by improving systems, including building instructional skills for teachers and management skills for principals, assessing students, improving data systems, etc. While it would be worth discussing the findings of the study more closely with a view to policy choices in Romania, it is important to keep in mind that there are different reform tools available e.g., for assessment and accountability. The McKinsey study as well as Fullan (2011) highlight that system reform always needs to be holistic and inclusive in order to be successful.

228. Fullan (ibid.) stresses the difference between *right drivers* for system reform:

1. [F]oster intrinsic motivation for teachers and students;
2. [E]ngage education and students in continuous improvement of instruction and learning;
3. [I]nspire collective or team work and
4. [A]ffect all teachers and students...

And the wrong drivers:

1. [A]ccountability: using test results, and teacher appraisal to reward or punish teachers and schools vs. capacity building;
2. [I]ndividual teacher and leadership quality: promoting individual vs. group solutions’
3. [T]echnology: investing in and assuming that the wonder of the digital world will carry the day vs. instruction;
4. [F]ragmented strategies vs. integrated or systemic strategies.

229. ‘No successful system in the world has ever led with these drivers’ (ibid). He clarifies, however, that ‘[t]he four ‘wrong drivers’ are not forever wrong. They are just badly placed as lead drivers. The four ‘right drivers’ [...] are the anchors of whole system reform.’<sup>88</sup>

230. The authors strongly concur with the underlying message: worshipping ‘accountability’ in combination with a punitive culture will not lead to the desired changes. In order to put the Romanian education system fully on track and transform it into a continuously improving

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<sup>88</sup> ‘The good news, however, is that the right drivers in combination – capacity building and group development – generate greater success and greater accountability’ (ibid, p. 11).

system, teachers (and students) will need to be placed at the center of reform and they will need support through capacity building and school leadership as they will do the ‘heavy lifting’ of education reform.

*[T]he wrong four as drivers de-motivated the masses whose energy is required for success; the right four drivers do the opposite. Countries that are successful (increasingly on a sustained basis have figured this out and will only get stronger*

Source: Fullan, *ibid.*

## V. Towards evidence-based policy making<sup>89</sup>

231. **As previous sections have shown, Romania can enhance the results focus of its policies and more generally promote greater evidence based policy making through better systems of monitoring and evaluation.** Strengthening the institutions promoting evidence based policy making is an area with high potential to ‘turn on the lights’ (Sondergaard, and Murthi, (2012)) and lead to stronger sectoral policies. Previous Sections have discussed approaches for measuring the impact of Active Labor Market Policies or Early Childhood Interventions; steps like comprehensive tracking of graduates can provide crucial feedback for the education sector. The final section will provide a broader overview of the pay-offs a more comprehensive approach to monitoring and evaluation could have.

232. **Previous sections have discussed some concrete M&E tools to improve education and labor market outcomes, as well as inclusion measures.** This is not an exhaustive list of all M&E tools, but a selection of tools already being considered by the Romanian government and being promoted at the EU level. Furthermore, given that the achievement of Europe 2020 goals is importantly linked to addressing the education and employment challenges, especially of Romania’s poorer and excluded communities, the report also highlights several M&E tools to promote their inclusion. Specifically, there are four main policy recommendations in the area of monitoring and evaluation:

**Recommendation 8.** Ensure that the programs being financed have results frameworks in place that clearly define inputs, activities, outputs, and impacts.

**Recommendation 9.** Undertake rigorous impact evaluations - social policy experiments - to learn which programs are the most cost-effective programs.

**Recommendation 10.** Take advantage of the Romania poverty map being produced to improve targeting of inclusion programs.

**Recommendation 11.** Strengthen labor market monitoring.

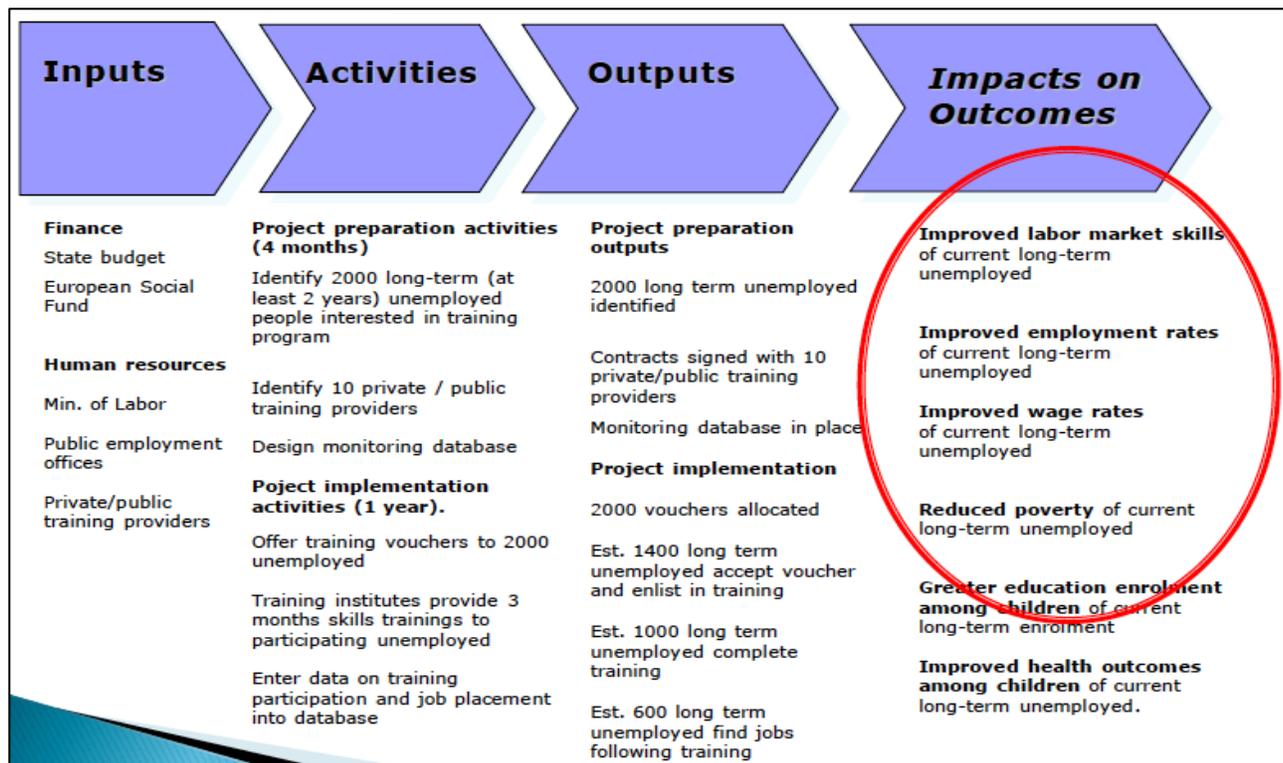
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<sup>89</sup> The chapter was prepared by Joost de Laat.

## Ensuring all programs have clear Results Frameworks in place

233. The draft guidance document ‘Monitoring and Evaluation of European Cohesion Policy’<sup>90</sup> highlights that it is often difficult to demonstrate the value of a policy because programs frequently focus on spending rather than achieving well-defined results or outcomes, such as improving job prospects, keeping children in school and learning, etc. Fortunately, there are basic tools - results frameworks - which require program design teams to clearly articulate the results chains by summarizing how the project envisions inputs (financial and human resources) translating into specific activities that will in turn lead to specific - monitorable - outputs, which in turn will contribute to achieving the ultimate desired impacts (results).
234. For example, the employment section of the NRP 2011-2013 proposes to implement measures for “improving the vocational skills of the labour force”, including “continuous vocational training for jobseekers.” When local service providers designing and implementing such measures are required to articulate results chains that are clear, concise, and measurable, as a pre-condition for funding, it will encourage more careful local level planning and facilitate accountability of achieved results ex post. Figure 44 below, provides a basic example. To institutionalize their use, the Romanian government – including the EU funds managing authorities - may consider extra capacity building of local authorities and service providers.

**Figure 44: Results Framework**



<sup>90</sup> European Commission DG Regional Policy. (Forthcoming) "The Programming Period 2014-2020. Monitoring and Evaluation of European cohesion policy - European Regional Development Fund and Cohesion Fund - Concepts and Recommendations."

## **Undertake rigorous impact evaluations – social policy experiments – to learn which programs are the most cost-effective**

235. **The policy options for achieving Europe 2020 goals are many and their policy outcomes often uncertain.** For example, the NRP 2011-2013 in the area of ‘reducing early school leaving rates’ calls for measures:

- Expanding the application framework of early education reform
- Providing the necessary support to prevent early school leaving by developing "School after school" social programs,
- Supporting early school leavers return to school by providing facilities and developing “Second Chance” type programs
- Increasing the relevance of pupils and students’ education and training by guiding education towards skills formation.
- Opening the school to community and business environment, with focus on disadvantaged areas.
- Focusing teacher training on those impact / change oriented fields that encourage school attendance in terms of quality)
- Developing vocational education and training

236. In addition to there being different policy measures – as highlighted above – for achieving a specific policy objective, namely reducing early school leaving, each of these measures above can further be designed in different ways. For example, “second chance” programs come in different kinds, as do school based management programs that promote greater involvement of the community or business environment. Similarly, in the employment component of the NRP 2011-2013, various active employment measures are highlighted to facilitate the transition from unemployment or inactivity to employment, ranging from training measures to enterprise support.

237. **Selected use of rigorous impact evaluations can promote the most cost-effective policy options for achieving Europe 2020 targets.** For example, there are many impact evaluations on the effectiveness of active labor market programs. Some of the evaluations are more rigorous than others. The available global evidence indicates that the impact of active labor market programs is mixed. A recent review<sup>91</sup> found that to improve labor market outcomes of unemployed people: (a) subsidized public employment is relatively ineffective; (b) job search assistance (which is often least expensive) is more likely to yield positive results, especially in the short run; (c) classroom and on-the-job training is unlikely to yield positive impacts in short run but is likely to yield relatively positive impacts over the medium term (two years).

238. **Against this background, governments and academics around the world** are increasingly using rigorous impact evaluations to pilot programs and measure their effectiveness. Impact evaluations:

- Help provide answers to program effectiveness in areas facing some of the greatest and most difficult social challenges
- Build public support for proven programs

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<sup>91</sup> Card et al (2010)

- Encourage program designers (governments, NGOs, etc.) to focus more on program results
- Provides incentive to academia to focus energies on most pressing social issues

239. An example of a rigorous impact evaluation is the recent Swiss study to measure the impact of adult education on labor market outcomes which has been discussed in the education and skills section.

240. **Prospective randomized evaluations – social policy experiments – are often considered to provide the most rigorous evidence on project impacts.** In these evaluations, a subset of potential beneficiaries is randomly selected to receive the pilot program. Randomly selected recipients and non-recipients are then followed over time and outcomes – e.g. employment or education outcomes – are compared. Randomization ensures the two groups have identical characteristics at the start of the program. This is very important, since it generally ensures that any differences that arise between the two groups – for example in education or labor market outcomes – can be attributed to the intervention and not to pre-existing differences that are often present if groups self-select into a project.

241. **Globally there are hundreds of randomized impact evaluations.<sup>92</sup> Often these impact evaluations involve partnerships of governments, international organizations, academics, NGOs, and also private sector companies.** These are also being institutionalized. For example, the Jameel Poverty Action Lab<sup>93</sup> is a global network of academics that work with implementing organizations to carry out randomized evaluations. USAID has launched an initiative called Development Innovations Ventures promoting rigorous evaluations of promising programs, and the World Bank has the Development Impact Evaluation Initiative<sup>94</sup> (DIME) and the Strategic Impact Evaluation Fund<sup>95</sup>, specifically support evaluations in education and health. At the European Commission level there is the Progress Facility financing social policy experiments. And, several European governments (e.g. France, Denmark, and UK) are doing the same.

### **Take advantage of the Romania poverty map to improve targeting of pro-poor inclusion programs**

242. **Achieving the Europe 2020 goals will require particular attention to improving the education and employment outcomes of the most vulnerable groups.** For some programs, administrative data are sufficient to identify the most vulnerable. However, an ongoing EC supported World Bank program of small area poverty estimation can provide important information for targeting the most vulnerable.

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<sup>92</sup> Examples include: Danish employment programs – e.g. intensive job counseling (see below); France employment programs focusing on youth, vulnerable populations etc.; Turkish employment program – skill upgrading; United States (youth) employment programs; Canadian self-sufficiency welfare program; Chile early childhood education program; Mexican conditional cash transfer program (PROGRESA).

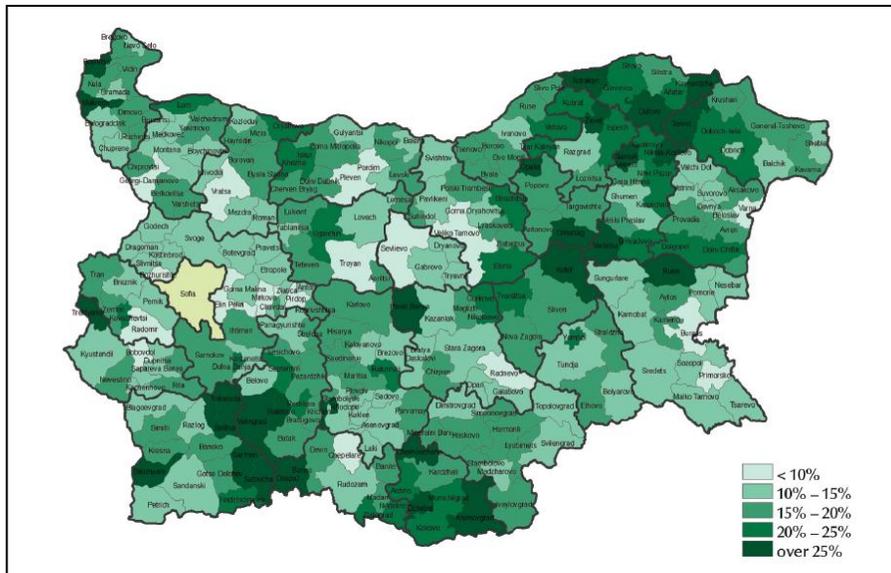
<sup>93</sup> [www.povertyactionlab.org](http://www.povertyactionlab.org)

<sup>94</sup> [www.worldbank.org/dime](http://www.worldbank.org/dime)

<sup>95</sup> [www.worldbank.org/sief](http://www.worldbank.org/sief)

243. **Small area poverty estimation is a method to identify the poorest and most vulnerable communities.** It combines household surveys such as the EU-SILC with information from the national censuses to estimate poverty rates, for example, at the municipal level, and show these on spatial maps. The World Bank, in partnership with statistical offices around the world, has produced small area poverty maps for more than 70 countries (as an example, see the poverty map of Bulgaria below). Throughout 2012-2013, the WB is working with National Statistics Office of Romania to develop a similar map for Romania. Experiences from around the world show that these maps can be used to improve targeting of resources for poor regions.

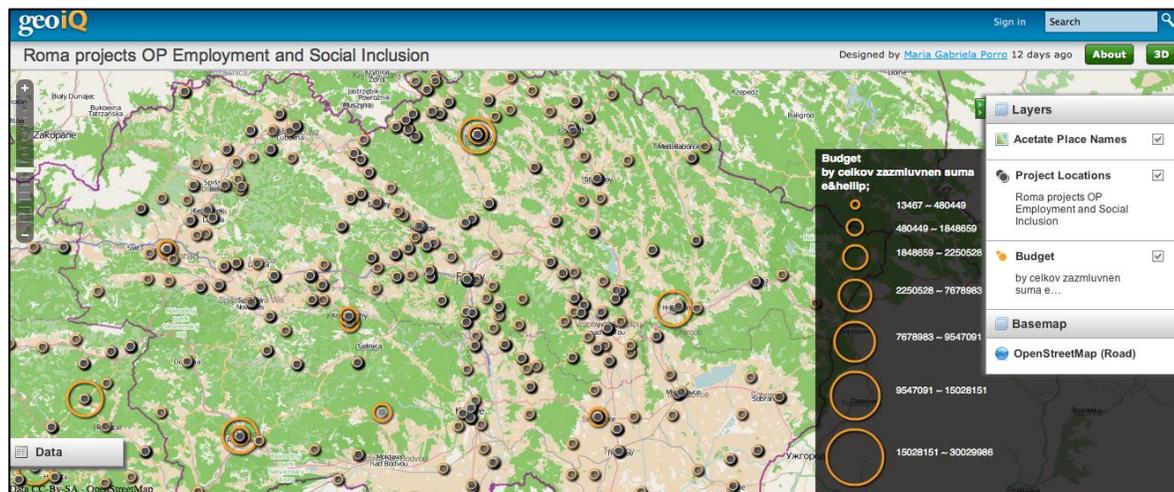
**Figure 45: 2003 Poverty Map of Bulgaria**



244. **The Romanian Government can consider systematically mapping the Europe 2020 projects,** provide periodic updates on these projects using standardized results framework reporting (above), and allowing Romanian citizens to comment on the projects and add information to the online maps. For example, using a mapping tool developed under the World Bank’s Open Aid Partnership program<sup>96</sup>, mapping projects is relatively straightforward and inexpensive to do. Below is an example of a pilot map showing all Roma related projects under the ESF OP on employment and social inclusion in Slovakia.

<sup>96</sup> <http://wbi.worldbank.org/wbi/open-aid-partnership>

**Figure 46: MoLSAF-WB Pilot Map of Roma Inclusion Projects in Slovakia**



## **Labor Market Program: Promoting Information Flows**

245. **Labor market information is key to labor market actors making rational choices and thus to good labor market performance.** The Government needs to have good quality information on labor market developments to formulate effective employment and education policies. Public Employment Services need to have good information on supply of and demand for labor by skill groups in order to provide effective job-worker matching services, and to design employment programs. Investors and employers need to have information on the supply of skilled labor to guide their investment decisions. Educational and training institutions need to use information on the demand for skilled labor to be responsive to the changing market needs, and to design adequate training curricula. Last but not least, students need to know about the demand for different skills and job prospects in order to make informed career choices.
246. **A number of countries put in place Labor Market Observatories** in order to improve the quality and scope of the available labor market information with the aim of improving labor market outcomes. Poland is one example, as discussed in the employment section.
247. This report has not only provided an analysis of challenges and opportunities concerning employment and productivity as well as skills demand and supply in Romania, it has given numerous examples of good practice and also examples of how proposed policy measures can be linked with monitoring and evaluation in general and Impact Evaluations in particular. **These tools should not be seen a panacea but as useful instruments which will help Romanian policy makers to set the course for the right reform measures** in future. It will also help enable catch up with other EU member states, meet the Europe 2020 targets and achieve healthy growth in future.

## Summary of Recommendations

The main recommendations from the sections relating to employment, education and skills development and monitoring and evaluation are summarized below.

### Employment (Section III)

**Recommendation 1.** Strengthen job creation (also needed to offset inevitable job reallocations) while fitting policy priorities to demographic imperatives. Policies include

- Advancing reforms, economic integration and diversification to facilitate firm entry/exit and to create enabling environment for businesses with high potential to thrive and create jobs and others to “fail fast, fail cheap”. As discussed in the macro-economic section, advance SOE restructuring and Doing Business reforms, and pilot interventions to foster entrepreneurship among youth and older workers who have accumulated the skills and know-how in their occupations and have potential to lead successful start-up firms.

**Recommendation 2.** Make workers more adaptable, develop incentives for work, and encourage more inclusive labor markets (eliminate barriers):

- Implement age-sensitive labor training programs to remedy basic (especially socio-emotional) and technical skills deficiencies of disadvantaged joblessness youth (including Roma) and of older adults outside the labor force, fit to market needs with apprenticeships – learning from successful youth training programs in Latin America, adult training programs in the U.S, Europe and other OECD.
- Improve work incentives by lowering the tax burden for low-wage and second earners, and remove barriers to work for youth, Roma, older workers and women through evidence-based ALMPs. Continue ongoing social assistance reforms to consolidate and tie social benefits to work requirements with the combined support through active labor market policies based on profiling of beneficiaries, and adaptation of labor regulations to facilitate the employment of women, youth and older workers through more flexible work schedules.
- Engage businesses in implementing measures to foster a more inclusive labor market, such as adaptations to the workplace for older workers, age-sensitive OJT, promotion of age-diverse teams, etc. – learning from recent experience in OECD countries.
- Face up to demographic imperatives. Establish smart migration policies to tap on needed talent in the Romanian diaspora.

### Education and Skills Development (Section IV)

**Recommendation 3.** Leverage European Structural Funds (ESF) to move towards universal kindergarten education (3 – 6 years) and develop conditions to massively increase expansion of

provision for the youngest (0 – 3 years). With regard to disadvantaged (in particular Roma) communities, scale up initial ECD work under the World Bank’s Social Inclusion Project and other ECD interventions whose impact has been established.

**Recommendation 4.** Build a structure for evidence-based policy making at the Ministry, including a data warehouse. Gain a better understanding of what’s going on in the classroom by using research instruments as classroom observations. In terms of accountability, focus on school value added and provide incentives for and acknowledgement of teachers working under particularly difficult circumstances.

**Recommendation 5.** Put the entire teaching force at the center of future change efforts. Reconsider the current salary model and use of ESF for development of the teaching force (school-based continuous professional development for teachers and training and support for principals). Support Roma teaching assistants through professional development.

**Recommendation 6.** Benchmark Romanian teacher policies internationally, for example through SABER, the World Bank’s System Assessment and Benchmarking for Education Results.

**Recommendation 7.** Use ESF to scale up tracer studies and make them mandatory for the entire higher education sector while providing appropriate support for their implementation.

## **Towards Evidence-based Policy Making (Section V)**

**Recommendation 8.** Ensure that the programs being financed have results frameworks in place that clearly define inputs, activities, outputs, and impacts.

**Recommendation 9.** Undertake rigorous impact evaluations – social policy experiments - to learn which programs are the most cost-effective programs.

**Recommendation 10.** Take advantage of the Romania poverty map being produced to improve targeting of inclusion programs.

**Recommendation 11.** Strengthen labor market monitoring.

## Annex 1: Unemployment structure by occupations and distribution of youth unemployment

Unemployment structure by occupations		
Occupations	TOTAL economy	Unemployed below 25 years of age
Unskilled workers in mixed farms	80,769	9305
Unskilled workers in the processing industry, not classified in the previous basic groups	70,004	11372
Unskilled workers in public works	36,951	4437
Unskilled workers in building construction	35,494	4462
Merchandise handlers	30,353	4209
Constructors and mounters of metallic structures	15,413	826
Mechanics of agricultural and industrial machines	10,583	425
Shop sellers	9,118	656
Sales assistants in shops	5,482	949
Operators on polishers, grinders and sharpeners	5,426	46
Masons and professions assimilated thereto	5,246	152
Drivers of lorries and high tonnage machines	5,220	117
Technicians for operations in the information technology and communication field	4,888	3333
Drivers of cars and light trucks	4,819	162
Stock record officers	4,770	186
Welders and autogenous cutters	4,554	57
Accounting experts and professions assimilated thereto	4,551	1066
Cabinet makers and professions assimilated thereto	4,484	355
Vehicle mechanics	4,480	793
Guards	4,402	181
Agriculturalists and skilled agricultural workers in field crops and vegetable cultivation	4,163	670
Mechanic technicians	3,841	2908
Economists	3,639	2002
Mounters of electric lines	3,583	372
Unskilled workers not classified in the previous basic groups	3,526	113
Carpenters and joiners	3,307	69
General managers, executive managers and professions assimilated thereto	3,015	200
Home Caregivers	2,859	29
Generalist medical assistants	2,754	1234
Unskilled forestry workers	2,744	328
Technicians in engineering sciences, not classified in the previous basic groups	2,630	2163
Skilled workers in executing handcrafted products from textiles, leather and similar materials	2,574	142
Packers	2,573	262
Pipe installers and mounters	2,519	178
Building administrators	2313	58
Technicians, electricians and energy technicians	2311	1873
Forestry workers and professions assimilated thereto	2252	158
Cleaning personnel in offices, hotels and other institutions	2227	70

Cooks	<b>2217</b>	427
Teachers in secondary education	<b>2165</b>	656
Construction workers in concrete works and professions assimilated thereto	<b>2005</b>	51
Waiters	<b>1934</b>	457
Mechanical engineers	<b>1880</b>	216

*Source:* ANOFM, 2012

## Annex 2: Minimum and maximum annual gross statutory salaries of full-time fully qualified teachers in public schools relative to GDP per capita (2011/12)



Source: Eurydice.

*Explanatory note:* The **basic gross annual statutory salary** is the amount paid by the employer in a year, including general increases to salary scales, the 13th month and holiday-pay (where applicable) excluding the employers' social security and pension contributions. This salary does not include other salary allowances or financial benefits. The **minimum salary** is the basic gross

salary received by teachers in the above-mentioned circumstances at the start of their career. The **maximum salary** is the basic gross salary received by teachers and school heads in the above-mentioned circumstances on retirement or after a certain number of years of service. The maximum salary includes solely increases related to length of service and/or the age. The values indicated in the diagram are obtained by establishing a relation between the minimum and maximum basic gross annual statutory salary in national currency and GDP per capita (at current prices in national currency) in the country concerned. The reference calendar year for per capita GDP is 2011 (for Bulgaria, Poland and Romania, GDP per capita is from 2010). The reference period for salaries is the 2011/12 school year or the calendar year 2011.

## Annex 3: Change for the better is possible: the Louisiana journey from fair to good

Historically, Louisiana has been one of the lowest performing states in the US over the past decade. Between 2003 and 2007, Louisiana was part of the ten lowest performing states in 8<sup>th</sup> grade math and reading test scores. The case of Louisiana has been featured on the McKinsey website McKinsey's 'How the world's most improved school systems keep getting better'.



In the summer of 2009, the Louisiana Department of Education launched the Superintendent's Delivery Unit, which Dr. George Noell, Executive Director, describes as a “process where we have clear, explicit goals, we’re going to organize all of our resources and energy around achieving those goals, and we’re going to benchmark ourselves against that constantly.” The Delivery Unit research produced nine such goals for student outcomes, starting with graduation rate.



As the video shows, the challenges have been great, but the impact has been significant. In just the first year of the program's full implementation, the graduation rate jumped from 67.2% to 70.1% – the single greatest yearly increase since the state began collecting grad rate data. Louisiana's overall standing in US state rankings jumped from 35<sup>th</sup> to 27<sup>th</sup>.



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