



FORMER YUGOSLAV REPUBLIC OF MACEDONIA

REVIEW OF HUMAN RESOURCES DEVELOPMENT

***Europe Direct is a service to help you
find answers to your questions
about the European Union***

**Freephone number (*):
00 800 6 7 8 9 10 11**

(*) Certain mobile telephone operators do not allow access to 00 800 numbers or these calls may be billed.

More information on the European Union is available on the Internet (<http://europa.eu>).

Cataloguing data can be found at the end of this publication.

Luxembourg: Publications Office of the European Union, 2013.

ISBN: 978-92-9157-607-4
doi:10.2816/1818

© European Training Foundation, 2013.

Reproduction is authorised provided the source is acknowledged.

Printed in Italy

© Cover photos: ETF/A. Jongsma

FORMER YUGOSLAV REPUBLIC OF MACEDONIA REVIEW OF HUMAN RESOURCES DEVELOPMENT

PREPARED BY ALI ERCAN SU, EDUARDA CASTEL-BRANCO AND MAJA GEROVSKA MITEV
Manuscript completed in December 2012

PREFACE

Over the past 15 years, the EU enlargement process has provided solid evidence that human resources are extremely important in the wide-ranging reforms launched by countries on their road to EU membership. At present, the Western Balkans and Turkey invest huge efforts in harnessing the potential of their human capital and maximising its contribution to economic and social welfare.

This review contributed to the programming of the Instrument for Pre-accession Assistance (IPA), namely to the revision of the Multi-annual Operational Programme for Human Resources Development (OP HRD, 2012-13) in the former Yugoslav Republic of Macedonia in 2012, as requested by the European Commission's Directorate-General for Employment, Social Affairs and Inclusion.

In line with the thematic priorities of the OP HRD, this report analyses key policies, issues and challenges in three pillars of human resources development: education and training in a lifelong learning perspective, employment, and social inclusion. The recommendations combine wider and specific perspectives and have definitely inspired the revised options of the OP HRD.

The review, drafted by the European Training Foundation (ETF) country team, with contributions from a national expert, gave the ETF the opportunity to look at the development of human resources as both an aim and a means of reforms orientated towards ever closer integration with the European Union. The report reflects the ETF's understanding of the major human resources development challenges faced by the country in its path to achieving smart, sustainable and inclusive growth. The labour market has shown signs of improvement in the last five years, but challenges remain. Coherent skills policies are called to play a major role in tackling the challenge, and the government is taking strategic initiatives to upscale the contribution of education and training for better socio-economic outcomes, innovation and competitiveness.

The review was a participative process, involving stakeholders in several rounds of consultation through structured workshops, bilateral meetings, interviews and debates with schools. In the preparation of this review, the ETF relied on evidence and knowledge gathered from numerous key government institutions, international organisations, non-governmental organisations, representatives from schools and social partners and independent national and international experts active in the three policy areas. The ETF is grateful to all organisations and individuals who shared valuable information and data with the team, and made this review possible. Special acknowledgments are due to the Ministry of Education and Science, the Ministry of Labour and Social Policy, the IPA Units at the two ministries, the Bureau for the Development of Education, the State Examination Centre, the State Inspectorate of Education, the Centre for Vocational Education and Training, the Centre for Adult Education, the State Employment Agency, the Agency for the Promotion of Entrepreneurship, the State Statistical Office, the Association of Units of Local Self-Government (ZELS), and universities, amongst others. Finally, our review team expresses gratitude to all international organisations that contributed to the review by sharing experience and knowledge.

On behalf of the ETF, I wish to thank the European Commission's Directorate-General for Employment, Social Affairs and Inclusion for entrusting us with the preparation of the review. I would also like to extend my thanks and appreciation to all experts and institutions in the former Yugoslav Republic of Macedonia for their responsiveness, involvement and valuable contributions to this paper. I am convinced that this report can be used effectively to better inform decisions and actions at both European and national levels. At the same time, I would like to underline the importance of continuity in the policy-making process at national level, in all its phases – policy formulation, implementation, monitoring and evaluation – and to assure the authorities that the ETF will continue to provide support for fostering the development of human resources in the country.



Madlen Serban
Director
European Training Foundation

CONTENTS

PREFACE	3
EXECUTIVE SUMMARY	9
1. POLITICAL AND SOCIO-ECONOMIC BACKGROUND	11
1.1 EU, regional and national political context	11
1.2 Demographic developments and trends	11
1.3 Economic developments and trends	12
2. KEY POLICY ISSUES, STRATEGIES AND CHALLENGES IN EDUCATION AND TRAINING IN A LIFELONG LEARNING PERSPECTIVE	13
2.1 Main characteristics and trends of education and training	13
2.2 Investment in human capital	17
2.3 Lifelong learning strategies, broadening the education and training supply and recognising qualifications	18
2.4 Issues and strategies related to early school-leavers	22
2.5 Secondary and post-secondary vocational education and training	23
2.6 Teacher training and learning in schools	27
2.7 Higher education	28
2.8 Institutional aspects in education and training	29
Statistical tables and figures	32
3. KEY POLICY ISSUES, STRATEGIES AND CHALLENGES IN EMPLOYMENT	47
3.1 Characteristics of the labour market	47
3.2 Labour law and industrial relations	50
3.3 Active labour market policies and activation measures	50
3.4 Unemployment benefit and social security system	52
3.5 Job creation, business environment and competitiveness	52
3.6 Policy framework and institutional set up in the employment policy field	53
Statistical tables and figures	55
4. KEY POLICY ISSUES, STRATEGIES AND CHALLENGES IN SOCIAL INCLUSION	65
4.1 Policy initiatives and programmes for vulnerable groups	65
4.2 Social inclusion in education	67

4.3	Social inclusion in employment	69
4.4	Territorial (regional) cohesion	70
	Statistical tables and figures	72
5.	INTERNATIONAL AND BILATERAL DONOR INTERVENTIONS	79
5.1	Education and training	79
5.2	Labour market and social inclusion	80
6.	MAIN CHALLENGES, STRATEGIC PRIORITIES AND RECOMMENDATIONS	81
6.1	Horizontal priorities and recommendations	81
6.2	Education and training	81
6.3	Employment	82
6.4	Social inclusion	84
	ACRONYMS	87
	BIBLIOGRAPHY	89

LIST OF TABLES

Table 2.1	Progress towards the common European objectives in education and training – indicators and benchmarks 2010/11 (%)	32
Table 2.2	Progress in the EU 2020 education headline indicator (%)	33
Table 2.3	Net enrolment rates by education level and gender, 2000-09 (%)	34
Table 2.4	Enrolment in upper secondary education by type of study, 2007-10	35
Table 2.5	Selected indicators on education spending – ‘inputs to initial education’ sub-dimension	35
Table 2.6	Ministry of Education and Science budget, 2009-11 (MKD)	35
Table 2.7	Ministry of Education and Science budget by user, 2009/11 (MKD)	36
Table 2.8	Summary of participation in international student assessments, 1999-2011	37
Table 2.9	Summary of selected state matura external exams, 2008-11	38
Table 2.10	Percentage of companies providing training to employees by size of company, 2009	39
Table 2.11	Enrolment in postgraduate studies by source of financing, 2008/09	41
Table 2.12	Participation of VET students in practice-based learning, 2010-12	41
Table 2.13	Students in VET by field of study, 2007-10	42
Table 2.14	Graduated higher education students by place of permanent residence, 2006-08	43
Table 2.15	Graduated higher education students by field of study (all cycles), 2000-08	44
Table 2.16	Mismatch between area of study and sector of employment for postgraduate students, 2008/09	45
Table 2.17	Centre for Adult Education budget breakdown, 2009-11 (MKD)	46
Table 3.1	Net employment growth, 2008-10 (%)	55
Table 3.2	Share of the working-age population by education level, 2004 & 2010 (%)	55
Table 3.3	Share of the labour force by education level, 2004 & 2010 (%)	55
Table 3.4	Labour market trends (15-64) – absolute numbers, 2007-10	56
Table 3.5	Labour market trends (15-64) – rates, 2007-10 (%)	56

Table 3.6	Public sector employment, 2007-10	57
Table 3.7	Share of employment by economic sector, 2007-10 (%)	57
Table 3.8	Employment by labour status and gender, 2007-10 (%)	57
Table 3.9	Registration forms submitted to the ESA for indefinite and temporary work, 2008-11.	58
Table 3.10	Unemployment by gender, age group and duration (1,000), 2006-09	58
Table 3.11	Registered unemployed by duration of unemployment and gender, 2008-11	59
Table 3.12	Registered unemployed by education level and gender, 2008-11.	60
Table 3.13	Female labour market trends (15-64), 2008-10	61
Table 3.14	Female labour force (15-64), 2008-10 (%).	61
Table 3.15	Youth labour market trends (15-24), 2007-10	62
Table 3.16	Youth labour force (15-24), 2007-10 (%).	62
Table 3.17	ALMP – budget, share of GDP, participants and coverage, 2008-11	62
Table 3.18	ALMP – total budget, 2007-10	63
Table 3.19	ESA budget, 2007-10	63
Table 4.1	Trends in poverty and material deprivation, 2005-10 (%)	72
Table 4.2	Relative poverty by household size, 2008-10	72
Table 4.3	Relative poverty by economic status of household members, 2008-10	72
Table 4.4	Relative poverty by educational attainment of household head, 2008-10.	73
Table 4.5	Relative poverty by type of household, 2008-10.	73
Table 4.6	Children in public institutions for child care and education according to ethnic affiliation.	74
Table 4.7	Numbers of primary schools, classes, students and teachers, end 2009/10	74
Table 4.8	Numbers of upper secondary schools, classes, students and teachers, end 2009/10	75
Table 4.9	Children in special primary and secondary schools, 2008-10	76
Table 4.10	Registered unemployed by ethnicity, 2011.	76
Table 4.11	GDP per capita by region, 2009 (MKD).	77
Table 4.12	Activity, employment and unemployment rates (15+), 2010 (%)	77
Table 4.13	Beneficiaries of social assistance, 2009	78

LIST OF FIGURES

Figure 2.1	Net enrolment rates by education level, 2000-09 (%)	33
Figure 2.2	Tertiary education students, 1999-11	34
Figure 2.3	Employment rates by education level, 2006-10	39
Figure 2.4	Unemployment rates by education level, 2006-10	40
Figure 2.5	Proportion of unemployed vs employed by education level, 2007-10.	40
Figure 2.6	Integral evaluation results, 2009-11	43
Figure 3.1	Employment rates (15-64) by education level and gender, 2006-09 (%).	56
Figure 3.2	Unemployment rates (15-64) by education level and gender (%).	61
Figure 4.1	Children and young people not attending education regularly by ethnicity.	75

EXECUTIVE SUMMARY

This review contributed to the programming of the Instrument for Pre-accession Assistance (IPA), namely to revision of the Multi-annual Operational Programme for Human Resources Development in the former Yugoslav Republic of Macedonia, as requested by the European Commission's Directorate General for Employment, Social Affairs and Inclusion. In line with the thematic priorities of the Operational Programme the report analyses key policies, issues and challenges in the three pillars of human resource development: education and training in a lifelong learning perspective, employment, and social inclusion.

In the preparation of this review the European Training Foundation (ETF) relied on evidence and knowledge gathered from numerous key government institutions, international organisations, non-governmental organisations (NGOs), representatives from schools, and independent national and international experts active in the three policy areas. Previous thematic and country reports produced by the ETF also served as reliable sources.

POLITICAL AND ECONOMIC CONTEXT

In the 20 years since independence, the former Yugoslav Republic of Macedonia has made great progress in terms of economic reform, decentralisation and social development of many kinds, but in spite of these advances the country still faces a number of persisting and emerging challenges.

International rankings of business climate and investment reform acknowledge the steady progress made by the country in recent years; a process most clearly demonstrated in the Ease of Doing Business ranking (World Bank, 2011a) where the country moved up from 34th to 22nd position in a comparison of 183 economies between 2011 and 2012.

HUMAN RESOURCES

Despite the inherent high levels of unemployment, modern enterprises often experience difficulties in recruiting skilled personnel, identifying inadequate levels of 'soft' skills among candidates as one of the key problems. Should this issue continue unaddressed, it will hamper the modernisation process and limit economic productivity.

Overall educational attainment of the working-age population and labour force improved between 2004 and 2010 as the share of the population with tertiary education increased. However, the total proportion of working-age

population with higher education attainment is still relatively low (10.3% in 2010) and there is still a significant proportion of the population with low education levels or no education at all (11% in 2010). These low-skilled people are overly vulnerable to long-term unemployment.

Education and employment policies will face many challenges in the coming years as the former Yugoslav Republic of Macedonia undergoes further economic restructuring and deals with the combined influences of an emerging services economy, new forms of work organisation in small and medium enterprises, an aging population, issues with the current skills mix of the working age population and ongoing social vulnerabilities.

The National Employment Strategy 2015 gives national targets of 55% employment for 2015, up from 43.5% in 2010, in line with the EU 2020 strategy. In addition, a reduction in the numbers of early school leavers is sought, down from 16.2% in 2010 to 14% by 2015. Equally importantly, the share of 30-34 year-olds with complete tertiary or equivalent education is expected to increase by 2% to 19% over the same period.

EDUCATION REFORM AND CHALLENGES

The education section of the Government Programme 2011-15 (Government of the Republic of Macedonia, 2011) consolidates policies launched in previous years with a substantial set of measures planned to support the higher education sector. Unfortunately, no comparable commitment to vocational education and training and adult education is foreseen in this document, despite the fact that the reform of these two sectors would help to resolve the human resources development challenges faced by the country. Nevertheless, in 2012 the Ministry of Education and Science and the VET Centre took the initiative to develop a strategy for the VET sector (2013-20), with ETF support. Based on a participative approach, the development of the VET strategy stimulated a debate on comprehensive responses to current and future skills development objectives and institutional reforms of the sector.

The education reforms of 2007-09 effectively extended the number of years of mandatory schooling and led to higher transition rates from lower to upper secondary education. However, enrolment rates in pre-primary, primary and lower secondary education continued to fall in a way that challenged the effectiveness of social inclusion and quality of education policies. A recent State Statistical Office (SSO) report explains that the education situation varies according to the level of education, with the number of school entrants in primary and lower secondary decreasing, along with the total number of students, while

the coverage of enrolled students in upper secondary and tertiary education has increased (SSO, 2012b).

Quality of education was placed among the policy priorities. However, after the adoption the National Programme for the Development of Education (2005-15) the country did not – until 2011 – participate in international student assessment. Results achieved between 1999 and 2006 in all international student assessment studies (PISA, TIMSS, PIRLS) were low across the areas (reading literacy, mathematics and science) at all assessed levels of education. The results of TIMSS 2011 showed a continuing decline of performance in science and mathematics. The country would benefit from participating more systematically in such studies, as these provide international benchmarks by which to gauge education system performance. In 2012, negotiations with the OECD on the country's participation in PISA 2015 have progressed.

Enrolment in higher education grew substantially in line with the increased offer of higher education throughout the country. However, this expansion of the university sector will require consistent efforts to improve and assure quality of provision and transparency of learning outcomes. In addition, numbers of humanities and social sciences graduates are currently on the increase, while the technical and medical sciences continue to lose ground. This trend could aggravate the existing mismatch between skills and the jobs available in a way that works against government policies for employment growth and modernisation of the economy.

The current vocational education and training (VET) system is predominantly school and theory-based and lacks the capability to respond to the demands of a restructured economy that requires employees with new types of soft skills and competences not previously catered for. The development of the VET sector strategy initiated in 2012 promises a renewed impetus for the sector, based on reinforced collaboration with social partners, but, if it is to meet the expectations, VET policy must concentrate on practical learning in cooperation with enterprises, improved quality programmes and flexible access for various categories of learners.

Institutional and resource constraints have hampered the piloting and implementation of VET policy concepts on system modernisation on multiple levels. These policy documents developed by the Centre for Vocational Education and Training (VET Centre) and adopted in 2010 have not provided the expected impetus to renewed debate and social dialogue on VET. Institutional mechanisms for social dialogue on VET potentialities have been established, but the full use of these must be further encouraged while joint activity between the VET Centre and the VET Council must be reinforced.

LABOUR MARKET AND EMPLOYMENT

Although the key labour market indicators have improved in recent years, the country still faces critical problems with increasing unemployment and high numbers of long-term unemployed – a group that accounted for 83% of all the jobless in 2010. Youth unemployment is another major issue, with 53.7% of young people out of work in 2010.

While employment increased to 43.5% in 2010, the target of 48% set in the National Employment Strategy for 2010 was not achieved and figures fell far short of the EU-27 average (68.6% in 2012). When approached from the opposite angle, the 32% unemployment rate for 2010 (31.6% in the first quarter of 2012) can be seen as a serious challenge for the country, and, when viewed in combination with the low job creation rate and the extent of skills mismatch, it becomes clear that the improved articulation of all relevant policies acknowledged in the new National Employment Strategy 2015 is very much needed.

The effectiveness of active labour market measures (ALMMs) in the country has been adversely affected by low coverage of target groups due to declining budgets and insufficient institutional capacity, high caseloads and inefficient targeting. For these ALMMs to be effective there must be greater resourcing, design adjustment and better targeting of priority groups.

SOCIAL INCLUSION

The initial focus of the social inclusion policy has been widened and the risk of exclusion is now associated with a greater number of factors including low levels of education, a lack of employment, larger size of household, ethnicity, geographical location and age. The growing legislative and policy base and an increase in the number of administrative bodies concerned with social inclusion policies and programmes have done little to resolve the real problems of poverty and social exclusion.

Furthermore, there is evidence of increasing segregation along ethnic lines in education. Municipal authorities must investigate the more effective use of available options for mixed school activities and endeavour to stimulate integrated education from early years in schools.

While the country has begun to engage in the process of education and employment policy reform, the need for further analysis and evaluation shows no sign of abating for the time being.

1. POLITICAL AND SOCIO-ECONOMIC BACKGROUND

1.1 EU, REGIONAL AND NATIONAL POLITICAL CONTEXT

Under the 2001 Ohrid Framework Agreement, the country made commitments to work toward the resolution of ethnic conflict and the governments since have maintained constructive social dialogue and social stability even through some periods of extreme tension.

Government decentralisation was a basic principle of the Framework Agreement that has continued to be implemented, with action plans approved up to 2013. Fiscal decentralisation has already occurred in 65 of the 85 municipalities, and a further five are in the final phase of a fiscal decentralisation process that allows more substantial transfer of competencies and financial management to the local level.

The decentralisation process was supported through capacity-strengthening actions in municipalities, but, despite input in areas such as management, financial control, planning and human resources, the capacities of these entities remain uneven. The Ministry of Local Self-Government must provide the impetus to accelerate progress toward decentralisation objectives with support from the Ministry of Finance (European Commission, 2011b).

The new governing coalition sworn in on 28 July 2011, following early elections on 5 June 2011, maintained the five priorities of the previous administration in their Government Programme 2011-15, namely: increased economic growth; European Union (EU) and NATO membership; measures to counter corruption and economic crime; promotion of good interethnic relations in line with the Ohrid Framework Agreement; and investment in education, science and a knowledge-based society. The new coalition has largely been successful in overcoming difficulties and reinforcing internal cooperation.

The Stabilisation and Association Council of January 2012 (Council of the European Union, 2012) noted the country's primary objective and strong commitment to open accession negotiations without further delay, and was informed of the government's dedication to further effective implementation of the necessary reforms. The EU called for significant further efforts in public administration reforms, notably as regards independence of the recruitment and promotion policy and respect for the principles of transparency.

Financial assistance is provided through the IPA, and management of the instrument was decentralized to the country authorities in 2011¹. The Multi-annual Indicative Planning Document for 2011-13 provides for a total EU contribution of EUR 305 million. The country continues to benefit from various regional and horizontal programmes, including cross-border cooperation.

1.2 DEMOGRAPHIC DEVELOPMENTS AND TRENDS

Demographic trends within the country have profound implications for the education and employment policies at the core of this report.

According to population estimates reported by the SSO, on 31 December 2010 the former Yugoslav Republic of Macedonia had 2,057,284 inhabitants and a population density of 80 inhabitants per km² (SSO, 2012a). The 2002 census gave a population of 2,022,547 inhabitants; an increase of 3.9% on the 1994 census and 43% up on the 1948 census. The rate of natural increase dropped from 4.5% in 2000 to 2.5% in 2010 as a result of a declining birth rate and increasing general mortality in the last 10 years, leading to a population growth rate of 0.25% in 2010. In 2010, 59% of the population lived in urban areas.

There have been significant changes in the age structure of the population. Between 2000 and 2010, the youth population (age 0-14 years) decreased from 22.3% to 17.4% as a share of the total population while the elderly population (65 years and over) increased from 10% to 11.7% (SSO, 2011a).

The share of 0-4 year-olds declined by approximately 18.2% while numbers of 5-9 year-olds fell by 22.2% with some difference between the genders. These trends lie far outside EU-27 average figures that showed a 1.3% increase in the lower age group, and a fall of 8% for 5-9 year-olds.

The most recent available census data comes from 2002 and it gives the ethnic composition of the population as: Macedonian 64.18%, Albanian 25.17%, Turkish 3.85%, Roma 2.66%, and Serb 1.78%.

¹ Four out of five IPA components were transferred to the national authorities under the Decentralised Implementation System.

1.3 ECONOMIC DEVELOPMENTS AND TRENDS

Following a rather moderate crisis-related decline in 2009, the economy strengthened over 2010-11, but now faces a worsening external environment that has created new risks and constraints to growth. Sound overall macroeconomic policies, low public debt, and limited cross-border financial linkages should continue to shield the country from the impact of adverse external conditions. Nonetheless, the economy is likely to face slowing growth and heightened risks, which are firstly linked with the growing crisis in the euro zone.

The International Monetary Fund (IMF) forecast growth of 3% for 2011, based largely on the strong performance in the first half of the year, but growth for 2012 is not expected to exceed 2% (IMF, 2011). Weak growth in trading partners and increased financial stress in the euro area are expected to reduce demand for the country's exports and contribute to tighter domestic financial conditions. Inflation is expected to decline to 2% in 2012, as the effects of higher food and commodity prices fade and in response to slowing domestic demand.

The authorities generally have a solid track record in meeting their deficit targets, and they intend to lower the deficit from 2.5% of Gross Domestic Product (GDP) in 2010 to 1.9% in 2013. The IMF considers the government's deficit target of 2.5% of GDP in 2012 appropriate in light of economic prospects, but recommends tight control over expenditure as the expected slowdown in economic growth will translate into a reduction in revenues relative to 2012 budget assumptions. The country had low public debt levels of 23.7% of GDP in 2009 that are expected to grow by only 2 percentage points in 2011.

The role of the state has generally increased as a result of the crisis and the slight decline in the private sector share of total value added, but state ownership has remained concentrated mainly in telecommunication, energy and public utilities.

The industry share in gross value added grew from 24.3% to 24.1% in 2007-08, but dropped below 21.5% in 2009, whereas construction contributed 5.7% in 2008, and 5.9% in 2009.

Total exports grew in the first half of 2011, mainly as a reflection of the weak baseline in 2010. Some sectors were visibly affected by the global crisis and the textiles, clothing and footwear sectors, in particular, saw a contraction of exports in the period.

Productivity started to recover in 2007. However, industrial productivity peaked in 2007 and has been falling since. Agriculture and industry saw a decline of around 1%, while the services sector increased its productivity by only 1%. Productivity in the construction sector went up to 14.5% in 2010.

The country depends on foreign direct investment inflows that declined following the global crisis. In 2010, the Macedonian Central Bank received a total of EUR 222 million; down from EUR 506 million in 2007 and EUR 400 million in 2008. Foreign capital also made an impact in the form of remittances from migrants, with Central Bank figures citing income from of EUR 1.366 billion from this item in 2010.

International rankings of business climate and investment reform acknowledge a steady progress over recent years, with the country moving up from 34th to 22nd in the Ease of Doing Business ranking between 2011 and 2012 (World Bank, 2011a), a clear demonstration that doing business has become easier. The country ranks among the leading five countries in the world in the Starting Business indicator.

The country is placed among the top 20 in the world on the protection of investors listing, while the World Economic Forum Global Competitiveness Report 2010-11 ranks the nation 79th of 130 countries. However, the relatively high position of the country is largely due to its definition as an efficiency-driven economy; a definition that means the relative success of the economy is based more on labour market and goods market efficiency in combination with higher education and training, than on any innovation-driven advances (World Economic Forum, 2011).

2. KEY POLICY ISSUES, STRATEGIES AND CHALLENGES IN EDUCATION AND TRAINING IN A LIFELONG LEARNING PERSPECTIVE

2.1 MAIN CHARACTERISTICS AND TRENDS OF EDUCATION AND TRAINING

Economic restructuring, the new organisational demands of small and medium enterprises and an emerging services economy combined with an aging population and the current skills mix of the working-age population in the former Yugoslav Republic of Macedonia will present many challenges for the education and training system in the foreseeable future.

In a climate of high unemployment, modern enterprises find recruitment of skilled personnel difficult, identifying the inadequate level of soft skills among candidates as one of the key problems. This issue must be addressed promptly if it is not to hamper future economic modernisation and productivity.

Lifelong learning

Lifelong learning must become a central, robust and fully-recognised pillar of the policy mix in order to:

- gradually improve the current educational attainment of the working age population and the skills mix for productive life;
- activate the population across all age groups, equipping job seekers and inactive individuals with skills for employment, self-employment and job mobility;
- improve the adaptability of the labour force and minimise skills mismatch;
- contribute to the competitiveness of the enterprise sector by offering high quality and accessible paths and formats for upgrading the competences of the employed and foster better-skilled entrepreneurial activity.

Decentralisation

Decentralisation of education management is anchored in the OFA conditions and key laws already passed. However, the uneven financial and management capacity of the various municipalities has adversely affected their performance in terms of support to schools and mixed ethnicity extra-curricular activities. Additionally the 2010 Ombudsman's report published by

the International Crisis Group highlighted a nascent issue with bias, stating that 'decentralisation, which for instance allows local municipalities to handle school director employment, has also increased the politicisation of local hiring and firing' (International Crisis Group, 2011, p. 11).

Participation in education

Participation in education is characterised by a combination of falling enrolment rates in primary and lower secondary education, and growing enrolment rates in upper secondary and higher education. The pattern of overall falling intake to primary and lower education appears to follow the trend seen in the EU-27 (European Commission, 2011c), but the problem is exacerbated in the former Yugoslav Republic of Macedonia by noticeable declines in net and gross enrolment rates in primary and lower secondary education. Official figures on the issue are released by the SSO, but there are diverging views on the accuracy of the data. The 2011 census is expected to shed light on this question. During this review staff of the Ministry of Education and Science questioned the accuracy of the enrolment rates in primary and lower secondary education reported by the SSO. UNESCO data are in line with the SSO (UIS, 2011). The Ministry of Education and Science considers that the enrolment rate should be close to 98%, thanks to measures implementing the new legislation on compulsory education.

Recent structural reforms in education result in young people staying more years in education on average, following a common trend with the EU. In the 2007/08 academic year the country increased the duration of lower secondary education to a statutory minimum of nine years, and upper-secondary education was made compulsory the following year.

The share of ISCED 3 students enrolled in VET has remained steady at close to 60%², despite a small decline in 2000-05. The large majority of VET students are enrolled in four-year VET courses (VET-4), which are essentially technical-theoretical, while three-year VET (VET-3) and two-year VET (VET-2) courses attract a declining number of learners.

A large proportion of VET-4 graduates sit the State Matura examination that provides access to higher education

(ETF, 2010b)³. Almost 45% of all VET-4 students enrol on the law and medical study paths: 24.3% in economy-law and trade and 18.6% in medicine-related fields.

Higher education

Enrolment in higher education grew by approximately 77% between 2000 and 2008, making an average annual growth rate of 7.4%. This pace substantially outstripped the EU-27 annual average of 2.5% for the referred period (European Commission, 2011c) and was an indispensable element in gradually overcoming the persistent low share of higher education attainment in the population. This growth is linked with increased higher education offer throughout the country coupled with state scholarships to support students.

Female students

Female students make up 53% of cohorts in upper secondary general education and first cycle tertiary education. Male students continue to predominate in secondary vocational education.

Adult learning

Adult learning has been given reinforcement in policy and the new Centre for Adult Education was established in 2008. A strategy and action plan was drawn up for 2010-15 and specific legislation was enacted on quality assurance in adult education.

Teaching quality

Greater emphasis was placed on improvement of teaching quality through actions to upgrade the professional skills of teachers in primary and lower secondary education. According to a unpublished report by the Bureau for the Development of Education, new teacher training programmes were rolled out in 2010 to reach a total of 49,962 primary and lower secondary teachers. These were mostly short training programmes that primarily addressed adaptation to new curriculum elements and teaching methods, but further sustained investment in teacher training will be needed for these to have a lasting and effective impact on the wider teaching situation at school level.

Student assessment

The State Examination Centre was established as an independent body to develop student assessment. The centre will launch external assessment in the form of normative tests for pupils in primary and lower secondary education in a way that will help demonstrate the degree of objectivity in teacher assessment of students.

The centre pursued the implementation of the State Matura from 2008 with the support of a World Bank project. The results produced since in these external exams show some improvement in the knowledge and understanding of a first language and literature with

significant improvement in means scores between 2008 and 2011. This trend is likely to be indicative of overall improvements in functional literacy; a fundamental pillar of lifelong personal and professional development. Progress in the learning of foreign languages has, however, been uneven and slow.

State Matura results in mathematics clearly show the country to be in the grips of a challenging situation. Sharply declining numbers of candidates at both basic and advanced levels raises questions about the future stock of knowledge in this essential area for tertiary education and further professional training. Also, mean scores for the basic level assessment remain very low, with 40% of candidates performing at levels 1 and 2; the lowest levels. Mean scores in advanced mathematics have improved since 2009, but the number of candidates is declining year on year. The evidence provided by State Matura outcomes clearly shows the area of mathematics is experiencing persisting weaknesses worthy of more specific attention from education authorities and schools.

The country regularly participated in international student assessment studies between 1999 and 2006 but there was an extended break from 2007 to 2011, when the country resumed participation (in TIMSS 2011 for eighth grade pupils). Between 1999 and 2006 performance was low across reading literacy, mathematics and science in all of these studies and at all assessed levels of education for age 9-10 years, 13-14 years and 15 years. The country's performance in mathematics and science in TIMSS 2011 (IEA, 2012a and 2012b) showed a continuing decline which underlines the persistent problems in teaching quality in spite of the ongoing reforms.

Strategic and legal framework and key reforms in education

The Government Programme 2011-15 includes five strategic priorities and states a commitment to investment in education, science and information technology as elements of a knowledge-based society (Government of the Republic of Macedonia, 2011). However, the actual education section of the programme does not list any specific concrete measures for vocational education, although it does refer to key secondary education policies that will increase practical learning and create vocational profiles in accordance with labour market needs. The single most pertinent measure given here in terms of the VET policy agenda concerns the establishment of adult education centres in several locations with the highest shares of low-skilled adults.

The 'business climate and competitiveness' section of the programme refers to concrete measures such as plans to establish a National Corporate Fund for employee training in 2013 to keep abreast of technological change and career centres to help students prepare for the transition to the world of work by the end of end 2012.

³ The share of VET-4 graduates completing the Matura was 75.8% and 65.4.3% in the 2007/08 and 2008/09 school years respectively.

Entrepreneurial learning programmes are planned to support the idea of small and medium enterprise in primary, secondary and tertiary education and the country has a stock of good practice that must be taken into consideration in these initiatives.

The social policy section shows a degree of continuity, particularly in the provision of training to enhance the employability and skills of the unemployed and to cope with shortages of labour supply for occupational areas such as the textiles industry, although these efforts are aimed at a rather limited number of beneficiaries.

Over the past decade, the former Yugoslav Republic of Macedonia has engaged in reform and modernisation of the education and training system through a number of actions. The comprehensive sector-wide National Programme for the Development of Education (2005-15) was drafted by professionals and academics and was adopted on 18 April 2006 at a Parliamentary plenary session after undergoing a broad consultation process.

A new 'Steps towards integrated education' strategy was developed with the OSCE support and adopted in 2010 as part of an effort to reinforce interaction between the ethnic communities and to facilitate the desegregation of schools. The strategy is intended to form a common umbrella that will ensure the coherent implementation of projects and initiatives supported by a range of international organisations.

As the country has increasingly engaged in education reforms across all sub-sectors, a greater need has arisen for the monitoring of progress, review of the effectiveness of the various types of measures and efforts to ensure the wider dissemination of findings, all of which are essential parts of the process. The time has now come for a review of the National Programme for the Development of Education (2005-15), five years after its adoption in 2006, and the provision of robust, consistent and comparable data and analysis will form an indispensable part of the process. It is precisely this sort of information that is anticipated from the Education Management Information System (established with the support of the Education Modernisation project that was concluded in January 2011) in combination with the outcomes of the Monitoring System for the OECD Indicators project planned as part of the Government Programme 2011-15 (Government of the Republic of Macedonia, 2011).

In the last decade, efforts have been made to create a legal framework to regulate state commitments to efficient education, reflecting the main developments in the EU. A number of laws and bylaws have been adopted to this end, the most significant of which are: the Law on Primary Education (2008), extending the duration of compulsory education from eight to nine years; the Law on Secondary Education (2007), proclaiming secondary education compulsory; the Law on Higher Education (2008), bringing the architecture of higher education into

line with the Bologna Process; the Law on Vocational Education and Training (2006) and; the Law on Adult Education (2008).

Several other measures have been taken to improve education sector performance and contribute to new practices in such key areas as quality assurance in education (school self-assessment and integral evaluation); the incorporation of key competences in the curriculum; professional development for teachers and; external student assessment in lower secondary education. In line with the general government policy supporting a digital economy, the Ministry of Education and Science introduced information and communication technologies (ICTs) in various aspects of education, including use of the 'e-diary', digital content (textbooks) and application of the 'one computer per child' maxim.

Steps were taken to institutionalise social dialogue and encourage closer practical cooperation between education and business, with the government approving the establishment of several consultative Councils (VET Council, Adult Education Council) made up of stakeholders from a range of government bodies and non-governmental and private organisations. Student internships have been regulated by new legal acts and enterprises are now entitled to tax incentives that encourage greater investment in training. Finally, a new inter-ministerial initiative was launched in 2011 to support the creation of university spin-off companies.

Progress toward the common European objectives in education and training (2010/11) indicators and benchmarks

The EU institutions have established a series of indicators and targets to help measure progress in addressing key common issues at all levels of learning. Education and Training 2020 (ET 2020) is the strategic framework for European cooperation in education and training adopted by the Council in May 2009 (Council of the European Union, 2009)⁴.

There are five benchmarks defined in ET 2020, and benchmarks 3 and 4 are also headline targets of the Europe 2020.

1. At least 95% of children aged between four and the age for starting compulsory primary education should participate in early childhood education.
2. Less than 15% of 15 year-olds should have insufficient abilities in reading, mathematics and science.
3. Less than 10% of the population should be early leavers from education and training.
4. At least 40% of 30 to 34 year-olds should attain tertiary education.
5. An average of at least 15% of adults aged 25-65 should participate in lifelong learning.

⁴ The new strategic framework (ET 2020) builds on its predecessor, the Education and Training 2010 (ET 2010) work programme. Some of the benchmarks for the 2020 horizon differ from the ones set for the previous decade, namely through the introduction of two new benchmarks: (i) on participation in early childhood education and care (in which the country clearly under-performs); and (ii) the new benchmark on tertiary educational attainment (in which the country needs to pursue the positive trend already initiated).

The seventh annual progress report of April 2011 examined the progress made in EU member states and candidate countries in 2009 under the EU's Education and Training 2010 work programme (European Commission, 2011c) and gave a mixed picture for the former Yugoslav Republic of Macedonia, in terms of both progress and performance (see **TABLE 2.1**).

The country performed well on the following two indicators:

- upper secondary education attainment of the population aged 20-24 – with 81.9% compared with the EU average of 78.6%; however, the country performed less well than Croatia (the top performer, with 95.1%), and Slovenia (89.4%);
- early school leaving – where the country fell just short of the EU-27 average, at 16.2% against the EU average of 14.4%, showing substantial progress.

But less well on:

- participation in early childhood education – with 28.5% against an EU average of 92.3%;
- share of the population aged 30-34 with higher education – at less than half of the EU average at 14.3% against 32.3%;
- participation in adult learning – at only one third of the EU average (3.3% as against 9.3%) although the country did register an increase from 2.3% to 3.3 in participation in adult learning between 2005 and 2009 (outperforming many other Southeast European countries as well as Turkey⁵). Data for 2010, however, showed a slight decline again to 3.2%, with women rating higher than men, at 3.4% to 3.1% respectively.

In 2010, the country showed improvement on the EU 2020 headline indicators for education of early school leaving and tertiary education attainment, with visible progress on 2009 figures in both areas (see **TABLE 2.2**). Early school leaving had improved by 1.3% to 15.5%, and tertiary education for 30-34 year-olds was up 2.8% at 17.1%.

More importantly, Eurostat data on the relevant (education) EU 2020 headline indicators from 2012 shows noticeable progress, with the country reaching 13.5% for early school leavers; a rate on a par with as the EU total. However, the gender breakdown of this score points to persisting high rates of female early school leaving (15.2%), comparing poorly to the EU trend of school abandonment of only 11.6% for women and girls; a rate far lower than the EU total for both genders. Tertiary education attainment for the population aged 30-34 increased by 2.3% to 20.4%, with women performing better than this, at 22.4%.

It is impossible to determine the reading literacy performance of 15 year-olds for 2009, as the country has not participated in the PISA tests since 2000. Results for that year showed a very weak performance, with 60% of results in the low performance category⁶, at a time when the EU average was 21.3%. Performance in science and mathematics have now also been added to the list of EU 2020 Education and Training benchmarks; yet another argument in favour of the Ministry of Education and Science participating in the next round of PISA, in line with the other candidate countries.

Enrolment rates

A critical issue in system performance is reflected in the shrinking net enrolment rates for primary and lower secondary education, sinking to 90.96% in the 2008/09 school year from 97.85% in 1994/95 (see **TABLE 2.3** and **FIGURE 2.1**).

The causes of this persisting trend are not clearly defined although socio-economic disadvantage is likely to be a major contributory factor. Monitoring the effectiveness of measures toward improved participation and inclusion is indispensable. At present, there are issues with the data in terms of the substantial gaps between Ministry of Education and SSO figures and harmonisation is urgently needed.

The SSO (2012b) reports: 'The situation in the sphere of education varies according to the level of education. The number of school entrants in primary and lower secondary education has decreased over the years, as well as the total number of students. The number of enrolled students in primary and lower secondary education in the school year 2011/12 is lower by 18.9% compared with 2001/02. Unlike primary and lower secondary education, the situation is better in upper secondary and tertiary education, where the coverage of the enrolled students has increased.'

Enrolment in pre-primary education is very low. Moreover, the figures declined continuously over the 2000-09 period and, as a result, less than 14% of eligible pre-school children were enrolled in pre-primary education in 2009⁷.

Policies to address the critical problems of social exclusion and its impact on equitable participation in lifelong learning must incorporate robust measures and be adequately funded to increase participation in good quality early childhood education and care. The government must improve articulation between policies managed separately by the Ministry of Education and Science and the Ministry of Labour and Social Policy and must increase the effectiveness of these.

5 European Commission, 2001c, p. 35. Bulgaria 1.4%; Croatia 2.3%; Romania 1.5%; Slovakia 2.8%; Turkey 2.3%. Data source: Eurostat (LFS database), May 2010. This indicator refers to people aged 25-64 who stated that they received education or training in the four weeks preceding the survey (numerator). The denominator consists of the total population of the same age group, excluding those who did not answer the question on participation to education and training. Both the numerator and the denominator come from the EU LFS. The information collected relates to all education or training regardless of relevance to the respondent's current or possible future job.

6 In PISA 2000, results for the former Yugoslav Republic of Macedonia gave 35% of participating students a reading literacy performance of level 0 (the lowest), and a further 28% a performance of level 1.

7 Net enrolment in pre-primary education as presented in Table 2.3 does not tally exactly with the indicator on early childhood education and care as defined by the EU's strategic framework Education and Training 2020 (ET 2020). The EU category captures only the population between age four and the age for starting compulsory education whereas the SSO category includes 'unspecified'. Hence the sizeable difference in the figures: 28.5% (2008) for the country indicator as defined by ET 2020; against 13.01% net enrolment rate in pre-primary education (2008) according to national education statistics.

TABLE 2.4 shows how female participation in upper-secondary education has been growing, both as a proportion of the total, and as proportion of general and vocational streams. This trend contributed to the higher share of female students in general education (54.1%), while male students continue to predominate in vocational education (56.1%) and as a share of total students in upper secondary (52%).

Growing female participation in upper secondary education and particularly in the general stream has an impact on the gender profile of higher education students as a whole. In the 2010/11 academic year, female students accounted for 53.1% of total tertiary enrolment. In 2010, tertiary education attainment for the female population aged 30-34 years was higher than the country average, at 18% to a general 17.1%.

Trends in completion of upper secondary education⁸ are an important measure of education efficiency. Access to upper secondary education has been growing, but the gross graduation ratio for upper secondary education for programmes offering direct access to tertiary education was only 70% in 2009. When compared with other countries of the region, the former Yugoslav Republic of Macedonia ranked behind Bulgaria, with approximately 74%, and Slovakia, with 89%, but outperformed the 63% of Croatia (UIS, 2011, p. 28).

Enrolment in tertiary education increased by over 70% between 2000 and 2011, largely as a result of explicit policy measures to expand access (see **FIGURE 2.2**). The data include figures for students in higher vocational education (3.3% of the total) and in public and private universities.

2.2 INVESTMENT IN HUMAN CAPITAL

The National Programme for the Development of Education 2005-15 (MoES, 2005, p. 27) stressed the need to increase public expenditure on education while working to improve efficiency and rational fund allocation and use. When the programme was at the drafting stage, the state budget for education was given at 3.49% of GDP, although the education budget had been reduced by 0.77% of GDP in the 1996-2003 period.

The OECD Investment Reform Index 2010 for South-East Europe analysed the sub-dimension of 'inputs to initial education' where 'initial education' is a flexible category that includes basic teacher training and core education at primary, secondary and tertiary levels, such that the inputs here include funding for teacher development and public and private resourcing of education at the three levels.

TABLE 2.5 gives a summary of selected indicators on education spending and shows the mixed picture for the Former Yugoslav Republic of Macedonia.

It is interesting that the relative priority given to public spending on education is higher in this country than in both Croatia (10.3%) and the rest of the EU on average (13.2%). More recent budget figures from 2009-11 confirm this sign of commitment with public expenditure on education given as 15.7% of the basic budget and 17.56% of total government spending for 2011 earmarked for the Ministry of Education (see **TABLE 2.6**).

However, figures for actual annual expenditure per secondary student as a share of GDP are significantly lower in the former Yugoslav Republic of Macedonia (7.5%) than in any other country listed in the OECD Investment Index 2010.

Table 2.6 gives details of the Ministry of Education's budget for 2009-11⁹. The 'total budget' figures of 4.59% and 4.65% of GDP respectively in 2010 and 2011 are far higher than figures in the past, at rates comparable to the EU average. In 2007, average EU public spending on education stood at 4.98% of GDP (European Commission, 2011c, p. 23), and in 2008, figures were closer to 4.8% for the EU-21 average (OECD, 2011a, p. 231).

However, the figures given under the ministry's 'basic budget' show that a far lower proportion of GDP is spent on education, with a figure more consistent with historical data of public spending on education at around 3% of GDP.

TABLE 2.7 provides a breakdown of the Ministry of Education's budget by user. From this data, it is not possible to calculate the rate of public spending by level of education as a percentage of GDP except for the higher education sector, due to the bulk allocation of 53% of the total budget of the ministry for 2011 to decentralisation. The state spent 1.34% of GDP on higher education in 2009, and 1.25% in 2011; a rate slightly higher than the EU-27 average of 1.12% in 2007 and the OECD average of 1% in 2008. The proportion of the ministry's budget designated to investment in infrastructure declined by a substantial 2% in 2010.

Data on private spending on education was not available at the time of drafting this report, but data on household expenditure substituted as a proxy shows overall household expenditure on education amounted to an average of 0.9% in 2010, ranging widely from 0.0% in the poorest decile to 1.9% in the wealthiest (SSO, 2011c).

Other state institutions apart from the Ministry of Education also provide finance for training, and the Employment Service Agency (ESA) is especially strong on this front (see Chapter 3 for a more detailed discussion of this issue).

Training for employees and members is also provided by the business sector, large companies and chambers of various sorts, and **TABLE 2.11** provides further information on investment in post-graduate higher

⁸ Upper secondary school completion can be measured by the gross graduation ratio, which represents the total number of upper secondary education graduates expressed as a percentage of the population at the theoretical graduation age for this level of education.

⁹ Data kindly provided by the Ministry of Education and Science, although no definitions were given of the terms 'total budget' and 'basic budget', making it impossible to clearly establish the difference between the two categories.

education studies where a breakdown of figures for the 2008/09 academic year is given by source of financing. Most of these funds clearly come from private sources, while enterprises contribute a mere 4% of the total.

International cooperation partners will continue to support the education and training sector and a major loan to support skills development is currently being scheduled by the World Bank¹⁰, with late 2012 given as a probable indicative launch period.

Other traditional bilateral and multilateral cooperation partners include USAID, UNICEF, the OSCE, the British Council and the EU. A traditional project-based approach continues to predominate in the country and better levels of active coordination should be achieved between the various streams of cooperation.

2.3 LIFELONG LEARNING STRATEGIES, BROADENING THE EDUCATION AND TRAINING SUPPLY AND RECOGNISING QUALIFICATIONS

Extended years of schooling

Over the 2007-09 period a two-pronged major reform was enacted in line with worldwide trends, extending compulsory education to nine years by adding an extra initial year of schooling in the 2007/08 academic year and expanding compulsory education to include secondary in the 2008/09 academic year.

This essential reform was accompanied by measures to lower the private financial burden of extended compulsory education through the provision of free transportation and textbooks. Supplementary financial incentives and support actions were also targeted towards vulnerable populations to boost their participation in education.

These reforms had immediate positive effects with transition from primary to secondary education increasing from 85.26% in 2003 to 96.42% in 2009.

Permeability

Transition from upper-secondary to tertiary education has increased significantly in recent years, from both general and vocational pathways. Measures were taken to improve permeability between VET-3 and VET-4 in 2010-11 by substantially decreasing the number of transition exams.

Introduction of a system of validation of non-formal and informal learning can contribute to enhance lifelong

progression in education and training, and increase the award of qualifications. Such a system should be transparent, articulated with the national qualifications framework and based on quality-assured competence-based assessment.

International experience demonstrates the indispensable nature of three particular elements: (i) a credit transfer and accumulation system organised to contain learning outcomes that can be achieved in a variety of learning contexts; (ii) modular training programmes; and (iii) quality assurance mechanisms that promote mutual trust among institutions.

Some of these essential elements are currently in the early stages of development in the former Yugoslav Republic of Macedonia.

- Legislation for a national qualifications framework for higher education was adopted in 2010 and a working group was established to develop the national qualifications framework further with an expansion into VET in 2011. However, concrete activities are partly dependent upon the initiation of planned international projects, particularly those with IPA funding.
- VET programmes are subject-based and defined on content rather than learning outcomes or units of learning outcomes. This makes programmes less flexible in terms of adjustments to the requirements of individual learners. Developments underway with EU assistance (2011-12) include the review of occupational and qualification standards as well as curricula for a number of occupations (mainly for VET-3). However, the increased share of practical training proposed in this new curriculum, which is a much needed innovation, is likely to undergo long discussions before endorsement by the relevant state institutions.
- A number of occupational profiles and standards have been developed separately with a variety of methodologies but with no systematic participation from industry representatives and workers. Most of the work already completed remains largely unused due to the extensive approval processes.

For a country with high levels of migration and circular migration, it is important for there to be a reliable system for the validation of all forms of learning, as this would help increase awareness of the skills and competences acquired during periods of migration in third countries and keep a record of labour and learning mobility in the EU for both individuals and stakeholders within the economy.

Career counselling and guidance

The Government Programme 2011-15 includes a set of measures to improve workforce quality through the creation of centres to provide career guidance for students through career planning and help with job applications, among other elements.

¹⁰ Preliminary information indicates that the loan could amount to USD 20 million.

The ESA has a history of managing career guidance and job clubs as components of active labour market policies (ALMPs). Their underlying approach in career guidance is to help individuals to identify their talents, interests and capacities, and to explore professional opportunities of matching characteristics. The ESA career guidance services also provide information on various professions and the labour market, and advise on pertinent education and training paths. Job clubs provide an interface with job searches and include some forms of short-term training for adaptation to new jobs, mainly in the form of ICT skills.

The function of career guidance within the education system needs to be reinforced as counsellors and psychologists are not always available at VET schools, reportedly due to resource constraints. In 2010-11, financial support from USAID was used to establish 11 career centres in VET schools across the country. The start-up financial support used for equipment and information materials is complemented by operational funding and capacity building actions to ensure that these centres are able to access and provide reliable information on employment trends, skills needs and jobs characteristics on a permanent basis and are given adequate training to embrace the variety of career guidance functions.

VET schools have traditionally promoted VET pathways, reported on careers in related professions and attracted pupils through general and profession-specific open days, competitions, fairs and announcements in the media and some municipalities contribute to successful promotion and information campaigns for their VET schools. However, while these initiatives play an important role in providing public information, they are unlikely to offer the targeted individual techniques required for bona fide career guidance.

There is also significant mismatch between student expectations and offers arising from industry. For instance, the Mechanical Faculty in Skopje frequently receives attractive internship proposals from large production companies targeted towards graduates and students, but the vice-dean of the Faculty informed this review that students show very little interest in these internships as, in his opinion, many students – even those enrolled in engineering – are averse to working professionally in the production sector. It is also possible that these offers from industry are not actually widely publicised among the student community.

Enrolment figures in VET-4 for 2009/10 show a heavy concentration of students in only a four of the 14 occupational groups: economy-law and trade (24.3%), medical (18.6%), electrical engineering (12.4%) and mechanical engineering (9.8%) but, oddly, the reasons for these choices are not necessarily linked to either the attractiveness of the subject for young people, adequate career information and guidance about their future prospects or any expected labour market outcomes.

As a matter of fact, it seems that student choices of educational pathway and, in the case of VET, occupational profile are far more likely to be a function of the educational offer directly available to each individual (in terms of the number of schools and types of vocational education on offer in their region or city of residence), family influence and trends within their social environment. Furthermore, an initial choice of vocational education does not indicate a deliberate long-term career and employment choice, as the majority of VET-4 graduates currently go on to sit the State Matura leading on to fields-of-study unrelated to their VET occupational profile.

Nonetheless, the issue of inappropriate career choice implicit in these facts does contribute to mismatch and low achievement in education often associated with dropout. This field-of-study mismatch could be targeted through the provision of quality guidance to students supported by information on returns to education by field of study well before they have to choose their educational options (Quintini, 2011).

The contribution of the career guidance services to reducing mismatch is inseparable from their role as the provider of robust and up-to-date knowledge on future trends. They must establish sound anticipation approaches and tools, adequate mechanisms for the interpretation and dissemination of results and work toward collaborative and active institutional partnerships. In skills matching and anticipation, as in any other area of human resources development policy, little can be achieved in isolation.

Key competences for lifelong learning¹¹

Curriculum reforms in recent years have emphasised a move toward competence-based learning and the development of key competences throughout the education continuum.

According to the Small Business Act assessment¹² of 2011, the country scores highly in most of the indicators linked with entrepreneurial learning at ISCED levels 2 and 3. All schools, both general and vocational, teach the mandatory subject of 'Business'. The Government Programme 2011-15 plans to reinforce entrepreneurial learning at all levels of education (from primary to tertiary), and the Bureau for the Development of Education has plans to redesign the relevant curriculum areas in 2012.

The government believes that better teaching of ICTs in elementary and high schools will lead to the creation of a better quality workforce, equipped to improve the quality of life in Macedonia. Additionally, this will create the conditions needed to attract investment and establish a climate favourable to the formation of new high-tech companies in a way that will create new jobs (Government of the Republic of Macedonia, 2011).

¹¹ The Reference Framework sets out eight key competences: (1) communication in the mother tongue; (2) communication in foreign languages; (3) mathematical competence and basic competences in science and technology; (4) digital competence; (5) learning to learn; (6) social and civic competences; (7) sense of initiative and entrepreneurship; and (8) cultural awareness and expression (Recommendation 2006/962/EEC of the European Parliament and the Council).

¹² The Small Business Act assessment is based on 10 dimensions and indicators, two of which refer to human capital aspects.

Government efforts to improve input on ICTs in education have included several infrastructure investment programmes in schools, the digitalisation of textbooks and learning support materials, teacher training to accompany the computer-at-school reforms and the ‘computer for every child’ programme. The e-education section of the Government Programme 2011-15 is expected to reinforce measures already initiated and place renewed emphasis on e-learning and lifelong online learning. A University of Information Technologies was also established to promote excellence in ICT education at the tertiary level¹³.

The status of the other key competences acquired through education at school can be assessed through national and international student assessment data, specifically when considering communication in the mother tongue and a foreign language, as well as mathematical competence.

International student assessments: PIRLS, TIMSS and PISA

The country participated in international student assessment studies between 1999 and 2005, but the practice was then interrupted until 2011, meaning that no later data was available and none of the national education levels since the adoption of the National Programme for the Development of Education (2005-15) has been assessed through international studies for half a decade. **TABLE 2.8** shows a summary of national participation in the three main studies from 1999.

A full list of participation in international assessment studies shows:

- fourth graders assessed on reading literacy (PIRLS) in 2001 and 2006 – they ranked low: 26th of 28 in 2001 and 38th of 45 in 2006;
- eighth graders assessed on mathematics and science in 1999 and 2003 (TIMSS), with no further international assessment since – results fell from 1999, more especially in mathematics. The results for TIMSS 2011 show a continuing decline in performance in both areas, with average scores substantially lower than the TIMSS scale centre point (500). The country ranks among the five lowest performers in science, with a score of 407. In mathematics, performance was slightly better, with a score of 426, in the group of the 14 lowest scorers;
- 15 year-olds last assessed more than a decade ago (2000) – results were low in all three areas of reading literacy, mathematics and scientific literacy. Their reading literacy was low overall, and 63% were classed as low achievers (levels 0 and 1).

In 2012-13, negotiations with the OECD on the country’s participation in PISA 2015 are ongoing. The OECD (2003)

analysed the relationship between average performance across the combined reading, mathematical and scientific literacy scales and GDP per capita (expressed as purchasing power parity), producing a spread that suggested countries with higher national incomes tend to perform better and that 43% of the variation between mean scores can be predicted on the basis of per capita GDP. Importantly, performance across the three literacy scales in the former Yugoslav Republic of Macedonia was lower than would be predicted from per capita GDP (OECD, 2003, pp. 102-103).

State Matura¹⁴

The State Matura, or graduation exams for students of secondary, vocational and artistic education have been held every year since 2008. The number of candidates has grown by a slight 2% since the exams began and **TABLE 2.9** shows the results for selected subjects.

In view of the results of the State Matura, the country clearly faces important challenges in communication in both mother tongue and foreign languages, but, more critically, in mathematical competence. The low number of advanced mathematics graduates combined with the low achievement of graduates of basic mathematics does not give a positive outlook for the overall future mathematical competence of the younger generation and this is likely to affect their performance in tertiary education studies as well as in general professional and social life.

Does education nurture key competences?

While enrolment in upper secondary and higher education has grown, many firms still complain that inadequate skills are on offer among potential employees. A World Bank report (Sondergaard and Murthi, 2012) suggests that the education systems of Central and Eastern Europe face problems with quality that partly contribute to the inadequate competences acquired by young people in secondary education.

The PISA test examines student ability to use knowledge and thinking skills for problem solving in a range of real-world contexts, and there is evidence to suggest that some of the countries showing a high proportion of students performing at the lowest levels are, in fact, scoring high on factual knowledge, but low on the reasoning with which to apply this knowledge. These students may not be failing in terms of the national guidelines and tests, for the expected competences of a 15 year-old, but their low PISA scores indicate serious deficiencies in their ability to use reading literacy as a tool to acquire knowledge and skills in other areas – a key competence for working within the global economy.

¹³ This university has seven faculties and two institutes, namely: the faculties of computer sciences and engineering; networks and communication technologies; information society technologies; media technologies; information systems and services; biometric engineering; and robotics; and the institutes of applied sciences and technologies; and wireless research. See <http://vlada.mk/?q=node/310&language=en-gb>

¹⁴ This section is based on data and clarifications kindly provided by the State Examination Centre in August-September 2011 in response to a request from the ETF. However, the interpretation of the data provided is entirely the responsibility of the authors of this report. The external section is based on tests prepared by relevant state commissions on individual subjects that also monitor and evaluate external independent assessors. The external exams include: (i) one compulsory subject – mother tongue and literature (Albanian, Macedonian or Turkish); and (ii) one optional subject – a foreign language (English, French, German or Russian) or mathematics or aesthetics/philosophy. The internal exams are based on tests prepared and evaluated by the schools, and include two subjects selected from a list relevant to the stream of education – general, vocational and arts.

A 15 year-old who is able to read proficiently may not be able to process the information well enough to access, store and utilise it in a form known as functional literacy. The same weaknesses can be observed in numeracy and the lower performers (in PISA terms) may experience significant difficulties in post-secondary education and the world of work. This gap may well go some way toward explaining the employers' perception of the inadequate skills mix of the younger workforce, as too many students are learning too little during their time in compulsory education.

Education systems in Central and Eastern Europe are more successful in imparting basic skills than advanced competences such as problem solving and critical thinking. Indeed, a World Bank report from 2012 states: 'most ECA countries do well in teaching children to "learn to read" but less well in teaching them to "read to learn" in a way that does not adequately stimulate advanced competences, placing undue emphasis on the acquisition of factual knowledge' (Sondergaard and Murthi, 2012, pp. 52-60). Many of the new generation of jobs offered in the labour market require individuals to apply the advanced competences and behavioural skills needed to deal with unpredictable situations, novelties and change.

None of the wide-ranging international student assessment studies for upper-secondary and tertiary education are able to provide a clear assessment of learning outcomes for these systems for life and work.

Lifelong learning and adult learning

The country indicator for participation in lifelong learning¹⁵ is largely lower than the EU-27 average, but the trend has grown from 2.3% in 2006 to 3.3% in 2009.

The government signalled a new commitment toward this area with the establishment of the Centre for Adult Education and adoption of the Adult Education Strategy 2010-15.

In 2011, the Centre for Adult Education prioritised actions geared toward quality assurance in the non-formal education and training system (where 'non-formal education' is commonly understood to include any education and training provided outside the regular school system for young people) with work starting on accreditation and the establishment of online databases of accredited providers. Activities for 2012 aim to reinforce institutional capacity and extract lessons learned from relevant policy initiatives from the EU. The Ministry of Education and Science initiated a parallel process to license providers of adult education.

A number of pilot training actions were deployed in regions particularly stricken by low levels of adult education. The Government Programme 2011-15

contains plans for 'adult education centres' offering second chance education and employment training for adults in locations such as Prilep, Shtip, Kumanovo, Gazi Baba, and Strumica (Government of the Republic of Macedonia, 2011).

A National Corporate Fund is being prepared to support continuing training for employees and their adaptation to technological change, with plans for this to become operational in 2013. At the time of drafting of this report, no further information was available on the governance policies and funding mechanisms for this Fund.

Job-related training provided by employers

Many employers complain that labour force competences are inadequate for coping with their job requirements. Innovative export-oriented companies report significant difficulties in recruiting employees with the required skill set, despite the fact that there are plenty of candidates available for interview due to persistent high levels of unemployment in the country.

The European Bank for Reconstruction and Development (EBRD) and World Bank Business Environment and Enterprise Performance Survey (BEEPS) (EBRD-World Bank, 2010) indicates that the number of firms who class the skills shortage as a constraint on operations is not as high in the former Yugoslav Republic of Macedonia as in the neighbouring countries of Serbia and Bulgaria, although the concept has expanded significantly: up to 27% of firms in BEEPS 2008 from 20% in BEEPS 2005. The same source also reports growing concern regarding worker skills and education among businesses, as the number of enterprises not viewing this as a problem fell by 7 % between the two surveys.

In spite of the positive achievements of the education systems in Eastern and Central Europe, BEEPS show that the perception of skills constraints among ECA firms changed dramatically around 2005, and by 2008, shortages of skilled labour had become one of the most commonly reported constraints to growth in the survey across all countries in the region, second only to the rate of taxation.

In the former Yugoslav Republic of Macedonia, employers offer relatively low training provision, calculated at 23% in the 2009 World Bank Demand for Skills Survey Macedonia (**TABLE 2.10**). Many larger companies with more than 50 employees have adopted an active attitude to employee training and three out of every four firms in this category have provided some form of training to employees over the last year. However, the bulk of the enterprise sector is made up of small and micro enterprises that are much less likely to invest in training; in fact only one in six micro enterprises trained any employees in a similar one-year period (World Bank, 2010a)¹⁶.

¹⁵ This indicator refers to people aged 25-64 who stated that they received education and training in the four weeks preceding the survey (numerator). The denominator consists of the total population of the same age group. The source of data is the EU LFS, May 2010. The information refers to all education and training regardless of relevance to the respondents' current or possible future job.

¹⁶ The latest available data from the Third Continuing Vocational Training Survey (CVTS3) show an EU average share of employees in training of 33% for 2005. New data from the 2007 Adult Education Survey show rates of more than 40% in the Scandinavian countries, and around 33% in Germany, the Netherlands, Slovakia, Austria and the United Kingdom.

Incidence of training by companies is also associated with the propensity for innovation in an economy. Given that 50% of the companies surveyed for the 2011 OECD Review of Innovation did not offer any type of training to their employees, and the remaining 50% mainly offered in-house training focused on technical (37%) and management-related issues (17%), the outlook for innovation in the country does not look encouraging. The companies that do offer training clearly tend to be more innovative as the figures show 80% of these have introduced an innovation between 2008 and 2010 and 5% have been granted at least one patent.

The 2011 OECD Review of Innovation considers that innovation and progress in the former Yugoslav Republic of Macedonia is also limited by the 'brain drain' factor to some extent and more than a quarter of companies reported at least one technical/scientific member of staff had emigrated in the last three years. In the survey, 20% of companies considered this siphoning off of skilled employees caused disruption to company activities.

Trends in educational attainment and the labour market

Overall educational attainment improved between 2004 and 2010 as the number of university graduates grew by over 3 % to reach 10.3% of the working age population and 15.5% of the labour force. Despite this positive trend, the proportion of the working population with no education or lower levels of schooling was still relatively high at 11% in 2010. In the same year, 44% of the working age population and 53.7% of the labour force had at most three or four years of secondary education, a situation almost unchanged from 2004.

The labour market status of individuals differs according to their level of education and this point should be an important consideration for the much-needed lifelong learning policy. **FIGURE 2.3** shows that university, or ISCED 5-6 level education is associated with employment rates that exceeded the country average by 27 percentage points in 2010 (corresponding to a difference of 70%).

Likewise, **FIGURE 2.4** shows that unemployment rates associated with this level of education in 2009 were lower than the country average by a sizeable 29%.

Despite the inherent advantage, however, unemployment for university graduates is still higher here than in most transition economies. Moreover, the initial comparative advantage on graduation shows a tendency to stagnate, as the associated employment rate gradually falls and the unemployment rate grows over time.

FIGURE 2.5 presents one possible measurement of qualification mismatch, comparing the proportion of unemployed against the proportion of employed by

education level¹⁷. There is a clear but gradually reducing shortage of labour with higher education, while the labour force with four-year secondary education is fast approaching the zone associated with excess supply.

This trend can be partly explained by the issue of vertical mismatch in the form of over-qualification, where people with higher education are employed in jobs that actually require lower qualification levels and skills, thereby pushing lower-skilled workers toward unemployment or employment in the informal economy (Bartlett, 2012). These trends apply pressure on VET graduates to pursue studies in higher education, an option likely to present an attractive alternative to an unsuccessful job search.

2.4 ISSUES AND STRATEGIES RELATED TO EARLY SCHOOL-LEAVERS

The numbers of early school-leavers improved from 22.8% in 2006 to 13.5% in 2011, but the education system is still showing low performance in areas likely to hamper its outcomes for learners, notably: (i) declining enrolment rates in primary and lower secondary education; (ii) very low and falling enrolment in pre-primary education (13.64% in 2009)¹⁸; (iii) low gross graduation ratio for upper secondary education (70%, 2009); and (iv) higher female to male early school-leaving (15.2%) contrary to the trend in EU-27 and candidate countries.

No precise data are available on dropout in secondary vocational education, but on the basis of data presented in the National Programme for the Development of Education in 2005, annual dropout in secondary education as a whole amounted to 2.84%. The highest dropout occurred in three-year secondary vocational schools and the lowest in general vocational schools and in four-year VET schools (ETF, 2010b).

The decision to make secondary education compulsory led directly to a decrease in the dropout rate through secondary education, shrinking it down to 1.11% in 2008, largely as a response to the legal penalties imposed on parents of non-attenders (ETF, 2010b).

Gender aspects have an important bearing on the issue, as there is apparent polarisation in female participation, for while female participation in upper-secondary and higher education has been steadily growing, net female enrolment rates in primary, lower and upper secondary education lag behind total national enrolment. Similar signals are given by the high numbers of female early school-leavers, with 17.5% of girls leaving school early in 2010, against a national total of 15.5% (European Commission, 2011d, p. 41)¹⁹ bucking the common trend for EU countries. Both of these trends indicate persisting socio-cultural and economic vulnerabilities that affect

¹⁷ Values equal to and above 1 indicate an over-supply of labour in the given category. Values below 1 indicate a shortage. This simple method provides an indication of mismatch, but has limitations that can be minimised by combining the outcomes with the findings obtained through other methods.

¹⁸ See the section on enrolment rates on p. 16 of this report.

¹⁹ Of the 32 benchmarked countries, only Bulgaria, Turkey and the former Yugoslav Republic of Macedonia have higher early school-leaving rates for girls than boys.

female youth more directly in a way that clearly demonstrates the need for articulation between policies for education and social inclusion.

An evaluation of VET-4 performed by the ETF (2010b) found that many VET graduates attributed responsibility for inadequate career choices in VET to their parents and the lack of career guidance and labour market information. When the choice of the VET school and occupational profile is inconsistent with a student's individual preferences and interests, decreased motivation for learning, poor achievement and dropout can ensue.

These issues all bear major implications for education and training policy in the short and medium-term in terms of:

- Appropriate policy mix – combining prevention, intervention and compensation measures: prevention should include early childhood education and care in combination with measures at system level; intervention should address schools and students; and parallel compensation measures should be enacted to provide second chance education for adults, re-entry to mainstream education and other support actions.
- Participation – increasing entry to early childhood education and care and preventing early dropout.
- Enrolment – stemming the flow of decreasing enrolment rates in primary and lower secondary education through sustained and mutually-reinforcing measures and incentives.
- Quality education – prioritising quality education and outcomes, social inclusion, teaching approaches better tailored to the individual needs of the students, and active cooperation with parents.
- Evaluation – ensuring more effective use of both the existing School Quality Performance Indicators and the school evaluation system to target the roots of early school leaving and identify practical solutions.

2.5 SECONDARY AND POST-SECONDARY VOCATIONAL EDUCATION AND TRAINING

The Bruges Communiqué on enhanced European cooperation in vocational education and training for 2011-20 stated that initial VET should be an attractive learning option highly relevant to labour market requirements and providing pathways on to higher education (Bruges Communiqué, 2010). In the current economic crisis where there are high unemployment rates among young people, the contribution of VET is of great importance in promoting employability and economic growth and in responding to broader societal challenges such as boosting social cohesion. VET also has a major role to play in the policy response to early school-leaving; a campaign that has been highlighted as one of the headline targets for EU socio-economic policy under the Europe 2020 strategy.

Issues of social dialogue in VET

The VET system in the former Yugoslav Republic of Macedonia is still a main contributor to the stock of human resources in the country with 58% of upper-secondary students following VET study courses (50.6% in VET-4 and 6.34% in VET-3). VET-4 courses are essentially based on technical-theoretical learning and they supply more entrants for higher education than for the labour market. Despite the convincing arguments expressed in favour of VET-3 courses in the National Programme for the Development of Education 2005-15, these have not been given priority in the reforms meaning the small share of students they attract is unlikely to increase in the near future.

Overcoming these issues is a challenge and a responsibility that requires the application of capacity at all levels in combination with a governance structure built on systematic dialogue with economic and social stakeholders. This review found interaction between the VET Centre and the VET Council to be hampered by a low level of mutual trust and a somewhat ambiguous understanding of the potential role of this interplay as was stated in Section 2.8 of this report.

The concept of strengthening cooperation between education and the business sector is present in a number of strategy and policy documents including the National Strategy for Employment 2015 and the National Action Plan 2011-13. These recognise that more systematic cooperation with social partners and better articulation of education and employment policies are needed to address the persisting mismatch between the education system and the skills needed on the labour market.

Cooperation between VET and the business community is formally regulated under the Law on VET (2006). This regulation contains provisions pertaining to VET organisation for the first time and also defines the rights and obligations of education institutions and employers.

Under this law, employers are entitled to some financial and tax relief when taking on trainees, and they also have the right to propose changes to existing VET schemes of learning and curricula or even the creation of new courses. It also states that a training agreement must be drawn up between the VET institution, the employer and the student prior to any placement being accepted. Unfortunately, this framework has not been sufficiently effective given the systematic references to insufficient collaboration between VET schools and employers and to the difficulties encountered in attempts to renew the VET curriculum.

As part of efforts to better structure social partnership in 2010, the VET Centre signed a number of Memoranda of Understanding and Cooperation²⁰ with business confederations, the Association of Units of Local Self-Government (ZELS), the ESA and other key organisations and chambers, before going on to produce an overarching Protocol of Social Partnership co-signed by the Ministry of Education and Science and the Ministry of Labour and Social Policy.

²⁰ Eleven of these are available on the VET Centre website. Last accessed 3 February 2012 at: www.csoo.edu.mk/index.php?option=com_content&task=blogcategory&id=46&Itemid=150

In 2012, the VET Centre began preparations for an innovative online register of companies eligible to provide practical training for VET students. A USAID project provided support to set up a register of reliable companies as a source of contacts for VET schools and students, with the pilot phase scheduled for September 2012. The VET Centre will need to publicise the register widely among potential users and keep it updated in order to sustain the undeniable value of this resource.

In June 2009, the Ministry of Economy and the Ministry of Education and Science signed a Declaration for the Promotion of Entrepreneurial Learning stating that both parties will: promote entrepreneurial learning at all levels of education; stimulate entrepreneurship and self-employment; and develop entrepreneurial education in national higher education policy. While the stated intentions are pertinent, implementation is problematic and will be inefficient without the support of structured collaboration between the policy institutions.

Anticipation of trends in skills demand

The country has established some elements of a skills anticipation system in the form of annual skills needs analyses by the ESA and sporadic employer surveys financed mostly by donors. However, the anticipation system still needs a combination of other instruments including: quantitative forecasting and projections; macro-economic, multi-sectoral models; scenario development; qualitative assessments by expert groups; and surveys if it is to effectively create the knowledge required by the system. This will satisfy the basic requirements, but the effective functioning of a matching and anticipation system is dependent upon the subsequent interpretation, dissemination and application of the knowledge in actions. This type of interaction requires institutional capacity and converging objectives among key players, at all of the micro, meso and macro levels.

The anticipation question is highly relevant for the VET system in particular, where it represents an area of constant debate and divergence between representatives of education and industry/enterprise. The VET Centre will need to take a leading role in this interplay in cooperation with the Employment Agency, the Centre for Adult Education, the Association of Units of Local Self-Government, regional level entities and organisations in the business sector.

This review found that there are no systematic mechanisms in place at VET school level to orient VET programmes to labour market skills requirements. Although dynamic VET schools maintain communication with local employers, these initiatives can only be partially effective while they remain sporadic in nature.

Meaningful cooperation between employers and education is considered easier to organise in the medical

group of occupations, due to the organisational characteristics of employers in the sector. VET schools in the medical area have established relations of mutual trust with sector employers in a way that enables the regular flow of information on job profiles, new technologies and work methods crucial to making VET programmes relevant to the labour market.

Skills mismatch and challenges for VET and higher education

A regular annual skills needs survey of employers known as the National Report on Skills Needs Analysis has been performed by the ESA since 2006 in order to provide short-term information on the hiring forecasts of employers in the following 12 months, however, the methodology and sampling basis means the results of the survey are likely to be biased towards low-skilled jobs.

Results from the 2010 ESA survey showed 43% of surveyed firms expected to hire new staff, representing about 10,060 new jobs in absolute terms. About 9.6% of the new jobs required professionals and managers with university level education, 15.2% required various types of skilled workers with secondary or higher education, 62.3% required skilled workers for elementary occupations and 12.9% required workers with just primary education. The surveyed employers generally stressed a preference for experienced employees, particularly for the higher-qualified posts.

The Demand for Skills Survey (World Bank, 2010b) revealed three main clusters of issues:

1. skills shortage leading to both structural and frictional unemployment²¹;
2. soft and behavioural skills at the heart of employer requirements;
3. modern enterprises more severely affected by skills shortage than traditional enterprises and investing more in employee training.

In the 2008-09 period, net job creation was highest for technicians (almost 12%) and professionals (approximately 7%), followed by sales staff, clerks and those employed in personal services. Net job destruction, meanwhile, was highest in elementary occupations (over 12%) and among machine operators (almost 10%).

This survey revealed that employers find it difficult to recruit highly-skilled workers, and that it takes four to five weeks to hire professionals, managers and technicians, compared with two weeks to fill a post in sales. Some 30% of employers claim they have encountered high or very high levels of difficulty in recruiting a worker with the required skills. In an apparent paradox, employers also find it difficult to recruit workers with only elementary skills, even though there is persistent high unemployment in the country.

²¹ Bartlett (2012). Skills shortage refers to the overall balance of supply and demand for workers with a given level of skills. It is therefore related to the phenomena of frictional and structural unemployment. Frictional unemployment occurs when employers are unable to find workers with the required skills, while at the same time workers with those skills remain unemployed because they are not aware that job vacancies for their skill type are available, or are searching for a better job. Structural unemployment occurs when workers have skills, which are no longer demanded by employers due to structural changes in the economy. In either situation unemployment and vacancies may coexist side by side.

The main reason given by 60% of employers for these recruitment difficulties is the inadequate skills level of potential employees and one third of the employers surveyed reported difficulties due to the low number of job applicants. Low wages (weak incentive to take a job) and the inadequate skills of job seekers with higher education applying for professional occupations can go some way toward explaining these two patterns.

Then again, there are many job vacancies, particularly in the area of personal services, which are difficult to fill due to their high demands on applicants.

Employers rate 'soft' skills most the important for job applicants, including, in order of importance: attitudes such as responsibility and reliability; overall literacy; communication skills; customer care; motivation and commitment; ability to work in a team; problem solving. Basic vocational and job-specific skills, such as ICT capacity, are ranked as being of middling importance, while advanced vocational and job-specific skills lie in the lower segment of the ranking as they are important to only 30% of employers.

Employers complain that job applicants, and young people in particular, are frequently lacking in ethical elements, particularly responsibility and reliability, and that they perform less well than older candidates in motivation, communication, customer care and literacy skills. Basic vocational and technical skills are also widely perceived as missing for this group.

Modern companies value competence in foreign languages and ICT skills more highly than traditional firms do, and, to a lesser extent, they also place greater importance on solid vocational and technical skills, and the behavioural skills of problem solving, planning and organisation, self-management and initiative. Therefore, modern companies are more likely to be affected by skills inadequacy or shortages, as their skills threshold is set higher than that of traditional companies. The skills factor may become a constraint to further modernisation of the economy if not addressed adequately.

Quality of outcomes of secondary VET with a view to labour market relevance

Many of the skills identified in the two surveys discussed above are unlikely to be acquired through regular VET programmes, given the characteristics of these courses as outlined in the following section.

Curricula for VET-4 programmes follow a standardised structure, valid for all 42 educational profiles within the aggregated 14 occupational groups²².

The VET Centre provided this review with the education plans for all profiles, produced collectively by a team of VET Centre advisors and published and endorsed by the

Ministry of Education and Science in 2007 (VET Centre, 2007). Study programmes of the 2006-08 period are also available for each of the occupational profiles. As at January 2012, the VET Centre website contains no additional relevant details of education plans or programmes relating to VET-3 and VET-2.

A close study of the education plans shows that the primary goal of VET-4 programmes is not to train learners for employment²³. The curriculum delivered is subject-based, theory-rich and practice-poor. The extremely low input on practical learning and the acquisition of technical knowledge mostly through theoretical teaching mainly prepare graduates for continued studies in tertiary education.

The weighting of practical learning in VET-4 programmes varies between a minimum of 9% for a legal technician and a maximum of 20-22% for a nurse or graphic technician; a low level by any reckoning.

The issue of limited practical learning is further compounded by questions relating to the quality of this input. Some of the profiles lend themselves to practical training through simulations and games, such as the creation of virtual enterprises in the economy-law-trade stream, where essential business planning and management skills can be learned. Other, more technical, lines use school workshops and laboratories for hands-on experience, but, on the whole, only limited possibilities are offered for practical learning by companies in any of the occupational profiles.

Although the Education Plans list foreign language acquisition, digital and entrepreneurial competences²⁴ as desirable skills, no explicit mention is made of acquisition of the soft skills relevant to working life in general or the transferable competences important for flexibility and mobility in employment. It is widely recognised that school and university graduates alike lack self-confidence and some of the important soft skills required by employers (ETF, 2010b).

According to information gathered during the 2012 Bruges stocktaking process led by the Ministry of Education and supported by the ETF, three types of practice-based learning are used in VET-3 and VET-4: practical training, summer practice and professional practice. The data on student participation in **TABLE 2.12** show that nearly 70% of the approximately 55,000 VET students took part in practical training, while only around 5% participated in professional practice.

VET Centre advisors reported extensive consultation with employers during the design stage of the VET-4 curriculum vocational component some years ago. The renewal and adjustment of VET profiles and the related curricula is hampered by rigidities in processes and factors such as the lack of initiative among key players including

²² The 14 occupational groups are: agriculture-veterinary; forestry-wood processing; geology-mining and metallurgy; machine engineering; electro-technical; chemical-technological; textile-leather fabrication; graphics; personal services; construction-geodesic; traffic; catering-tourism; economy-law and trade; and medical.

²³ The weighting between the general and vocational theoretical curriculum is approximately 48% and 30-34% respectively. In the healthcare group, certain profiles contain 50.7% of the general education curriculum. The optional part of the curriculum (approx. 6% of the total workload), largely aims to reinforce relevant technical and scientific knowledge for the given profile.

²⁴ All of which are listed in the framework of key competences for lifelong learning (European Parliament, 2006).

the VET Centre itself, but more particularly, contacts in industry. Practitioners in VET schools are calling for greater flexibility to change and update both profiles and curricula, and employers should be better involved in such processes.

Fields of study – choices and issues

Student choices of field of study in VET remained stable over the three academic years from 2007/08 to 2009/10 (**TABLE 2.13**). Economics-law and trade attracted around a quarter of all enrolled students in each year and the medical area took almost a fifth of all students, with numbers for both streams growing very slightly over the period. These two areas together attract almost 45% of all VET students.

Mechanical and electrical engineering captured 9.8% and 12.4% of students in 2009/10 respectively, but their shares have been declining slightly, as have absolute numbers of enrolled students. Of the other study areas, only personal services have shown significant growth in the numbers of enrolled students.

OECD findings give similar trends on field of study (OECD, 2011a) and show strong gender differentiation. The four fields of services, social science-business-law, health and welfare, and engineering-manufacturing-construction absorb the large majority of graduates.

In the medical, economy-law-trade occupational groups, nearly 80% of graduates sit the State Matura for higher education, while in the electro-technical, geology-mining and metallurgy, traffic, and forestry-wood processing groups this figure is in the 60-75% range.

These figures reflect the trend in upper-secondary education as a whole in the country. The percentage of upper-secondary graduates entering higher education today, including those from VET-4, is much larger than it was eight years ago, up from 42% in 2006, through 64% in 2007, to 85% in 2008 (ETF, 2010b).

The factors that influence students' career choices in secondary VET are a combination of supply, enrolment policy and social perceptions, and, to a minor extent, objective career guidance and information on labour market trends and employment perspectives. The ETF evaluation of VET-4 in 2010 (ETF, 2010b) suggested other factors, such as: continuation of education, financial potential of the family and place of residence, also played a role.

Quality in education

Quality in education is assessed through a combination of external evaluation known as the 'integral' or 'integrated' approach and school self-assessment, both of which apply a common system of school quality indicators (MoES, 2010 and 2011; USAID, 2011).

The 2005 Law on Education Inspection gave the State Education Inspectorate a new mandate to assess the quality of education in schools through this integrated evaluation and, with international technical assistance, the State Education Inspectorate reinforced its human and institutional capacity, established a standardised methodology and tools and developed the school performance quality indicators system.

Integral school evaluation was initiated across the country in 2009, using the common system of indicators and an agreed methodology to produce objective, comparable and unambiguous data that will contribute to a culture of quality improvement based on partnership and cooperation with schools.

The exit evaluation report for the five-year support project (USAID, 2011) sustains that substantial improvements were achieved in terms of mutual trust between inspectors and schools while developing the technical capacity for fair and transparent school evaluation. The report highlights a number of areas for further improvement, particularly in terms of ensuring the sustainability of school evaluation, improving current practice, boosting the quality of evaluation reports, and disseminating the findings.

The integral evaluation approach assesses school performance against indicators organised in seven areas: national and subject curricula; pupil attainment; learning and teaching; support to students; school ethos; resources; and management, leadership and policy making.

The State Education Inspectorate provided a summary of key results for this review as shown in **FIGURE 2.6**. It evaluated 248 out of a total 457 public primary and secondary schools in the 2009-11 period. The quality of education at the 214 schools evaluated in 2010-11 fell into in two roughly even blocks of²⁵: 'good' (53% of evaluated schools) and 'partially satisfactory and unsatisfactory' (46%). A total of 40 of the schools evaluated were urban vocational schools and their scores also came out as mostly 'good' (57.5% of evaluated VET schools) and 'partially satisfactory and unsatisfactory' (42.5%).

Teachers consider this evaluation system useful for school development, but many recommend wider dissemination and debate of the common findings. Some teachers would appreciate the opportunity to express their opinions on certain weaknesses of their schools more openly.

The Quality of the Educational Process report (MoES, 2010) synthesises the extensive evidence base created through integral evaluation of schools and represents a valuable source for inferences on the effectiveness of policies on the quality of education. Other appropriate sources include the Education Modernisation project implementation and results report (World Bank, 2010b) and the ETF report on the Collaborative Evaluation of VET-4 (ETF, 2010b).

²⁵ Only two schools received the highest score 'very good'.

The large World Bank-financed Education Modernisation project ended in January 2011²⁶ with an overall implementation status classed at 'satisfactory'. This project focused activities at the school level mainly in lower secondary and selected upper-secondary schools, targeting the improvement of quality of learning and participation.

Although most of the project indicators were met, the declining net enrolment rate in lower secondary education continues to be a major concern. Also, while reports on the schools involved showed high levels of practical adoption of new teaching techniques in classrooms, the report expressed concern over the sustainability of teacher training and ensuring a regular supply of teaching aids in 2011 – both major contributory elements to quality in education.

The 2010 Ministry of Education's report also points to weaknesses in areas like teaching and learning, arguing that the new classroom teaching techniques are not being applied system-wide and that other elements are also missing. The key persistent challenges to teaching quoted were:

- the dominance of traditional teaching methods with no use of ICTs and weak teacher-student interactions;
- poor use of teaching aids leading to low student motivation and a lack of stimulation to learn;
- the inability of schools to identify the educational needs of all students.

In school management, leadership and policy making, the report concluded that:

- self-evaluation and development programmes do not correspond to the true situations in schools;
- schools have no established system to support probationer teachers.

On VET schools specifically, the report stated that:

- most schools have not developed cooperation with neighbours and the business community;
- the offer of extra-curricular and project activities, optional subjects and free classes in secondary vocational schools is not provided in accordance with the needs of the students.

The information gathered by the collaborative VET-4 evaluation (ETF, 2010b) concluded that the main strength of VET-4 lies in the general and vocational theoretical knowledge acquired by students.

The main weaknesses highlighted unanimously by employers are that school leavers have insufficient specific work-place competences, weak entrepreneurial skills, low self-confidence, poor initiative and a lack of creativity. For their part, VET-4 graduates are critical of the quality and relevance of practical training, the career guidance and information available, programme articulation with higher education, and with the quality of training materials and equipment used in most VET schools.

VET schools and teachers who participated in the evaluation generally expressed positive views on the effectiveness of VET-4 reform, but they stressed the following unresolved shortcomings that affect the quality of the system: the educational profiles and curricula available are outdated and urgent change is needed through more flexible and frequent up-dating; there is no systemic communication between the worlds of work and education; cooperation with higher education institutions, municipalities and enterprises is weak; improved and reinforced support is needed from the VET Centre. Employers are inadequately informed of reforms in the VET system and they recognise that cooperation with VET schools is insufficient. As a result, they are calling for adjustments to educational profiles and the network of VET providers.

2.6 TEACHER TRAINING AND LEARNING IN SCHOOLS

Teachers and teacher educators face a continuous process of professional development and networking in order to keep abreast of the sea of changes to the education system. These changes include elements such as the adoption of new curricula and new teaching paradigms, the introduction of new technologies and digital content and the new school quality assurance system, coupled with increased requirements for inclusive education.

The former Yugoslav Republic of Macedonia faces the same problem of aging teaching staff and gender bias as the rest of the EU countries. In 2008, 30% of all ISCED 2 and 3 secondary education teachers were aged 50 years and older against a figure of 34% in the EU-27. For ISCED 1, teachers in this age category represented only 25% of the country total, against 28.5% in the EU-27 (European Commission, 2011c). In primary and secondary education, more than 60% of teachers here were women in 2008, compared with 70% in the EU-27.

The Bureau for the Development of Education (BDE) coordinates teacher professional development programmes in primary and secondary education. Programmes are implemented by accredited training providers and by BDE staff. International partners cooperate with the BDE in various areas of professional development for teachers and their teacher training programmes reached almost 50,000 primary and lower secondary teachers in 2010, mostly on short courses of five to eight hours' duration.

BDE teacher training activities in 2010 addressed the following range of topics and target users:

1. adaptation to the new curriculum and related novelties – short training, large numbers of participants, delivered by BDE staff;
2. methodology (teaching strategies and techniques, assessment, special educational needs, school management, ICTs, school and community) – longer duration, large numbers of participants, delivered by accredited training providers;

3. specific areas linked with international projects or donors – varied duration, varied scale of participation, delivered by external trainers;
4. e-tools for teaching – very short training delivered by the BDE in cooperation with the Ministry of Information Society to train teachers in use of the e-content portal²⁷. (Some other teacher training programmes work in cooperation with national specialised institutions, such as the Macedonian Institute for Media, to teach the use of media content in the teaching process.)

The BDE report of 2010 refers only to a few 24-hour courses on software for robotics and industrial devices delivered in teacher training for VET schools.

The BDE works closely with several international donors: USAID on the Primary Education project; UNICEF on improving literacy and numeracy in early years; the Goethe Institute on German language teaching; and the British Council on English language training for new teachers, amongst others.

NGOs and international organisations support the professional development of teachers in the early phases of their careers in areas related to education and social inclusion (OSCE), as well as with key competences, in particular entrepreneurial learning (SEECEL²⁸ and NCDIEL²⁹). The Network of Entrepreneurship Educators, established in November 2011, is expected to reinforce teacher competences in this area.

In daily classroom practice, teachers are confronted with many errors in textbook content. An article written in November 2011 (Hadzi-Zafirova, 2011) provides worrying examples of serious errors in details, scientific facts and issues of a culturally sensitive nature in lower secondary textbooks in subjects including sociology, geography and physics. One particular controversy sparked by a sociology textbook led the former Minister of Education to order a review that concluded practically none of the textbooks in use in the country are completely error-free. One teacher training expert from St Cyril and Methodius University attributed the copious errors to a combination of lax reviewers, inexpert teacher-writers and a lack of coordination between the government oversight agency and the national textbook commission (Hadzi-Zafirova, 2011).

2.7 HIGHER EDUCATION

The low rate of tertiary education in the population is a key challenge for an education policy that is making great efforts to approach the issue through an expanded educational offer and more student scholarships. Twenty years ago, the country had two state universities whereas providers today include five state universities and some 18 private higher education institutions. In the 2010/11 academic year 14 towns across the country had entities offering courses classified as dispersed higher education studies.

Enrolment of first year students in public universities grew by over 200% from 2000 to 2008 and by 40% between 2005/06 and 2010/11. Total enrolment expanded by 77% in the same 2000-08 period. There were a total of 63,250 students enrolled in the 2010/11 academic year, 33,583 (53.1%) of whom were female and with 83.2% of all enrolment in public tertiary institutions.

Annual growth in tertiary education graduates was 8.9% in the 2000 to 2008 period, a figure substantially exceeding the EU-27 average of 4.5% (European Commission, 2011c). **TABLE 2.14** shows that the highest growth rate by far occurred among graduates from the Polog and Southwest regions at 291% and 99% respectively.

This report has already pointed out that higher education is associated with better labour market status in terms of higher employment and lower unemployment rates. However, there are signs that the advantage offered is fading, as the number of registered unemployed with higher education rose rapidly between 2008 and 2011 with an extra 2,500 individuals from this education bracket among the jobless (for further discussion of this issue see Section 3.1).

Trends in the distribution of graduate students by field of study show predominance in the social sciences and humanities, where the number of graduates grew by almost 278% between 2000 and 2008, increasing its share of the total from 58.3% to 73.4% of all graduate students. The corollary trends are a contraction from 7.4% to 5.9% in the technical sciences and from 9.7% to 5.6% in medical science. **TABLE 2.15** shows that similar declines have hit natural science and mathematics and biotechnical science. This sturdy pro-humanities tendency may even aggravate the existing mismatch between skills and jobs, and the SSO data shown in **TABLE 2.16** confirm that social sciences graduates are more likely to be unemployed.

In contrast, OECD and EU-21 data for 2009 give the joint share of students enrolled in 'humanities, arts and education' and 'social sciences, business and law' as no higher than 53% in OECD countries (OECD, 2011a, p. 85).

The country joined the Bologna process in 2003 and the new Law adopted in 2008 brought in many changes: it gave the universities an integrated structure, introduced several new approaches in governance and student representation, strengthened the national Quality Assurance agency, established employer and international participation in quality assurance, ensured compliance of the national quality assurance system to European Standards and Guidelines (ESG), described first and second cycle using the European Credit Transfer and Accumulation System (ECTS) and generic descriptors based on learning outcomes, aligned doctoral studies with the European Higher Education Area overarching qualifications framework, and, introduced the Diploma Supplement.

²⁷ See www.skool.mk

²⁸ South East European Centre for Entrepreneurial Learning (www.seecel.hr/).

²⁹ National Centre for Development of Innovation and Entrepreneurial Learning (www.ncdiel.mk/).

The Bologna Stocktaking Report 2009 (Rauhvargers et al., 2009) acknowledged the progress registered for various indicators in three areas of reform: the degree system, quality assurance and recognition. The greatest progress was reported in three indicators: level of student participation in quality assurance, national implementation of the principles of the Lisbon Recognition Convention, and stage of implementation of ECTS.

The Stocktaking Report highlighted future challenges in: ensuring equitable access to higher education, increasing participation, strengthening lifelong learning, supporting science and research activities, training teaching staff to improve the quality of higher education, and, implementing the new legislation on governance.

Amendments to the Law on higher education in 2010 addressed the research and technological capacity of universities and their potential for innovation. A decision was made that 40% of income from tuition fees in public higher education institutions must be used for fundamental and applied research, upgrading the research infrastructure and the training of teaching staff.

In 2011 the Ministry of Education and Science and the Ministry of Economy reached an agreement to support university spin-off companies focused on commercialisation of applied research and the competitiveness of these enterprises. Special priority will be given to projects encompassing industrial design, engineering services, new technologies and medicine.

The 2008 Law on Higher Education regulates practical learning and states internships must make up 10% of study programmes, or no less than 30 days of practical learning. In addition, faculties are required to organise teaching activities involving the participation of experts with proven experience in the particular professional area. However, the national economy only has limited capacity to serve or host students in such forms of practical learning, as most of the companies in the country are small enterprises with tight technical and financial constraints. Some faculties organise full monitoring and follow-up for intern students, providing support throughout the internship, but good practice is still limited.

National qualifications framework

An important step in the right direction was seen in the 2010 adoption of the National Framework for Higher Education Qualifications that will form an integral part of the comprehensive national framework for lifelong learning, which is currently under development. The shift in focus to learning outcomes from a content-based approach is seen as an essential stage in the development of the national qualifications framework (NQF), and plans are in place for complete revision of the qualifications and programmes in line with level descriptors. A national register of higher education qualifications is being prepared.

In 2012, inspired by the outcomes of the Bruges Process (review of progress in VET), the working group in charge of preparing a comprehensive NQF resumed its activity,

resulting in a coherent and well-argued concept document. The draft NQF concept was completed in January 2013 and underwent a preliminary review in February with ETF support.

The draft NQF concept positions the NQF as an important regulatory tool in the educational landscape of the country. Its strong points are that it: (i) identifies users and beneficiaries; (ii) identifies the main qualifications that should be part of the framework; (iii) encompasses all levels of education and training, formal and non-formal; (iv) incorporates explicit elements of quality assurance of qualifications and programmes; (v) sets out roles for the sectoral committees, bodies in charge of qualifications and an institution responsible for the process overall.

On the other hand, the NQF concept will require further discussion on a number of issues: (i) quality assurance is limited to institutional programme accreditation and any further work on quality assurance should embrace both the qualifications inserted in the NQF and the assessed competences of the individuals receiving the qualification; (ii) clarification and coherent use of key concepts, e.g. skills, modules, credit, assessment, institutions accredited to educate, train and assess; (iii) the set of descriptors for levels 8 to 5a differs from the set used for levels 1 to 5b – this divergence needs to be tackled to avoid the barriers to permeability getting worse; (iv) VET is classified to a maximum level 5b, which anticipates discontinuity and academic bias against the trend to open up all levels for vocationally or professionally oriented qualifications in most European countries; (v) there seems to be a strong focus on ensuring that qualifications are developed exclusively by existing public institutions and universities, although sectoral committees are increasingly engaged in doing much of the upstream work, including some anticipation of skills needs and development of profiles and occupational standards; (vi) the format of the overarching NQF body is at a very early design stage. In 2013, the country will become a member of the European Qualifications Framework (EQF) Advisory Group, prepare its roadmap for EQF referencing and present a report by the end of the year. Given the substantial workload and the time needed until the adoption of the NQF legal basis and the referencing report, this target deadline might be revised.

2.8 INSTITUTIONAL ASPECTS IN EDUCATION AND TRAINING

The architecture of the public agencies or centres in charge of various aspects of education and training has changed in recent years toward greater specialisation and, in certain cases, more autonomy.

The Ministry of Education and Science is the leading policy body covering all levels and sectors of education, as well as science and research, although it shares responsibility for innovation with the Ministry of Economy and for pre-school education with the Ministry of Labour and Social Policy.

At central government level, primary and secondary education is supported by the following public agencies accountable to the Ministry of Education:

- the Bureau for the Development of Education (BDE) – in charge of curricula, standards, professional development for teachers;
- the State Examination Centre – established as autonomous centre for student assessment in 2009, having previously operated within the structure of the BDE;
- the State Education Inspectorate – responsible for quality control of schools;
- the Pedagogical Service – established by Law in 2011 to strengthen the child-raising skills of parents and to work with and counsel parents;
- the Directorate for Development of Education in Minority Languages;
- the National Commission for Textbooks – responsible for ensuring the quality of textbooks.

On the local level, Municipalities are responsible for the provision of resources and legal compliance, but uneven institutional and financial capacity among these entities has an impact on their performance.

An Education Management Information System (EMIS) was recently established and is in the process of being integrated into the policy cycle in its capacity as a source of information and evidence. The country has stepped up reforms and measures across the entire system and there is a need for the systematic collection and analysis of feedback among the many public institutions involved. EMIS has the capacity to play a vital role in improving the monitoring and feedback system.

Tension exists in many areas within this architecture, primarily in relation to the capacity and autonomy of institutions; a function of human resources, budgets and coordination. But other tensions exist in relation to the autonomy of certain agencies with critical functions, such as the State Examination Centre that separated quite recently from the BDE and that still lacks the independence and autonomy it needs for decision making in relation to student assessment.

Potential tensions also arise from unresolved expectations linked with the issue of shared competences between various entities.

Finally, fragmentation of tasks and restricted communication flows and information dissemination lead to inefficiencies in the diffusion of good practice and other vital aspects.

VET Centre and Centre for Adult Education

There is ample ground for potential interaction between the VET Centre and the Centre for Adult Education due to the focus on lifelong learning of both of their remits. Closer collaboration between the two bodies could result in more and better outcomes and must be established on a more systemic and organised basis. Both centres have

been gradually reinforcing their capacities, but both are under-resourced in terms of budget and human capacity for the scale and scope of their functions and activities; a context that impacts adversely on a collaborative work culture.

The VET Centre was entrusted with the role of strategic and operational leadership for this sector after it was removed from a former existence as the Sector of VET within the BDE and established as an independent institution in 2007.

The National Programme for the Development of Education in the Republic of Macedonia 2005-15 envisaged a broader strategic role for the then future institution, but the 2006 Law on Vocational Education and Training revised the original vision toward a narrower operational role.

The VET Centre operates on a five-year organisational development strategy for the 2010-15 period, articulated around the six priorities of staff development, processes, quality assurance, communication, partnership and international cooperation. Interviews held with VET Centre advisors in mid-2011 for the purposes of this review appeared to show limited progress in the implementation of these activities.

VET Centre funding continues to be allocated within the overall BDE budget in a way that, from the perspective of the VET Centre, hampers managerial and decision-making capacity. The estimated budget required to fund the VET Centre work programme for 2011 was not met, and the substantial discrepancy had serious implications on the quality of activities and the capacity to deliver services to VET providers.

More effective solutions are needed on the issues of autonomy, leadership and performance in the VET Centre. In its current situation, the VET Centre will have difficulties in meeting the challenging objectives set, especially considering the new policy proposals for VET-3 and VET-2 reform currently awaiting feedback from the Ministry of Education.

Although most of the key advisors are trained and committed professionals, the VET Centre still needs to consolidate institutional capacity and credibility by improving the relevance of its output for VET stakeholders and by engaging in more effective policy dialogue with key ministries and social partners.

Social partnership and social dialogue are essential pillars in establishing relevant and efficient VET and adult education, and the legal framework provides support and encouragement for systematic consultation and cooperation between the education and training sector and the world of work and business.

At central level, the VET Council and the Adult Education Council are the consultative bodies established by law to support and advise the respective centres (VET Centre and Centre for Adult Education) in policy making and the technical development of programmes.

However, the actual consultative and advisory activity of the VET Council is limited, and mutual trust between the VET Centre and the VET Council is in need of reinforcement. Only sporadic consultation has been held on new draft legislative amendments, concepts and strategic proposals drawn up by the VET Centre. Most of the representatives from key ministries (including MES) are not officially appointed members of the Council – a fact that negatively affects the motivation of Council leaders and the Council capacity to carry out its function with the necessary legitimacy.

The VET system has benefited from international technical assistance and experience through consecutive EU VET reform projects, USAID institutional development initiatives, the application of British Council occupational standards, social partnership initiatives and other elements that have contributed to capacity building among providers and within the VET Centre itself.

In discussions with the VET Centre for the purposes of this review, questions were raised about the sustainability of outputs of these cooperation projects, particularly in seeking explanations as to why many of the new methodologies and institutional development recommendations have not become firmly rooted within VET Centre practice.

Budgets and staffing

Since its inception, the VET Centre has been operating with less than a third of the planned number of staff and it has never actually operated within the planned functionality. There is currently a total of 16 staff including the director, against initial plans for 59 staff in the rules adopted by the Management Board on 30 March 2011.

The Centre for Adult Education also has always operated under strong budgetary constraints and with insufficient staff. By the end of 2011, new recruitment had brought total staff numbers to 12, still far short of the planned number of 43 posts. In addition, the temporary status of the majority of the staff does not contribute to their motivated performance at work.

This review received detailed budget figures from the Centre for Adult Education, while the VET Centre provided information solely on staffing resources. Senior staff in the VET Centre informed this review that only approximately half of the total amount of the budget application for 2011 (submitted through the BDE) had been allocated.

TABLE 2.17 provides a breakdown of the budget for the Centre for Adult Education.

Research and innovation

Innovation is recognised as an important priority in development of the economic competitiveness of the country and also in the EU approximation process. The Ministry of Education and Science is mostly responsible for the regulation of scientific activities and the two main related Laws focus on regulating the activities of public bodies involved in research activities, but they have limited impact on the promotion of innovation activities and links between research institutions and private sector companies.

The Ministry of Education's perspective is targeted towards general research and development (R&D) rather than innovation, with a budget of MKD 65 million in 2011. The draft R&D Strategy developed in 2010-11 seeks to increase levels of investment in R&D from a current 0.22% of GDP to 1.8% by 2020 and the ministry will be drawing up a four-year R&D programme within the next few months. The Ministry of Education's Scientific Council forms the current consultative forum on R&D and this ministry has future plans to establish a Committee for Technological Development made up of seven ministry members.

Effective institutional dialogue on innovation is underdeveloped at all levels, as is the case for other policy areas. The structural frameworks established by law are not in active use, partly due to the lack of financial resources and capacity.

STATISTICAL TABLES AND FIGURES

TABLE 2.1 PROGRESS TOWARDS THE COMMON EUROPEAN OBJECTIVES IN EDUCATION AND TRAINING – INDICATORS AND BENCHMARKS 2010/11 (%)

	MK		EU average		EU benchmarks ^a	
	2000	2009	2000	2009	2010	2020
Participation in early childhood education (4 year-olds to year before start of compulsory primary)	17.4	28.5 (2008)	85.6	92.3 (2008)	–	95
Low achievers^b (15 year-olds)						
Reading	60.0	–	21.3	20.0	17.0	15
Mathematics	–	–	24.0 (2006)	22.2	–	15
Science	–	–	20.2 (2006)	17.7	–	15
Early school leavers (18-24 years)	22.8 (2006)	16.2	17.6	14.4	10	10
Upper secondary attainment (20-24 years)	–	81.9	76.6	78.6	85	–
MST graduates (higher education)						
Increase since 2000	–	6.7 (2008)	–	38.1 (2008)	+15	–
Share of females	41.6	42.8 (2008)	30.7	32.6 (2008)	Improve gender balance	–
Higher education attainment (30-34 years)	–	14.3	22.4	32.3	–	40
Adult participation in lifelong learning (25-64 years; 4-week period)	2.3 (2006)	3.3	8.5 (2003)	9.3	12.5	15
Investment in education Public spending on education as % of GDP	3.35 (2002)	3.39 (2003)	4.88	4.96 (2007)	–	–

(MK) Former Yugoslav Republic of Macedonia – provisional code that does not affect the definitive denomination of the country to be attributed after the conclusion of the negotiations currently taking place at the United Nations;

(a) defined as EU average performance levels expressed in weighted averages;

(b) PISA study results: for reading, from 18 EU countries; for maths and science, from 25 EU countries;

(MST) Maths, science and technology.

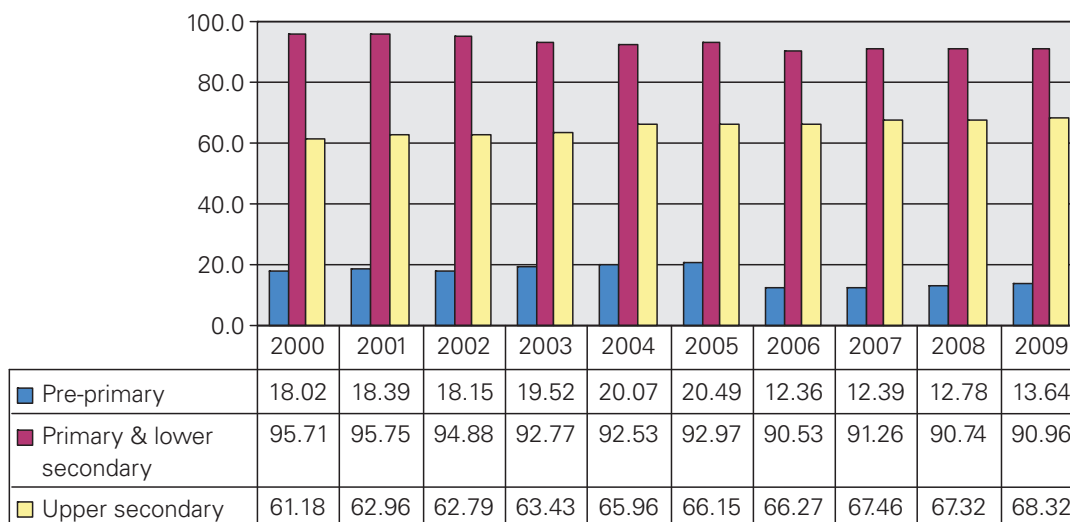
Source: European Commission, 2011, p. 173. Source of data: Eurostat (UOE, LFS) and OECD (PISA).

TABLE 2.2 PROGRESS IN THE EU 2020 EDUCATION HEADLINE INDICATOR* (%)

		Former Yugoslav Republic of Macedonia			EU-27 average		
		2006	2009	2010	2006	2009	2010
Early school-leaving	Total	22.8	16.2	15.5		14.4	14.1
	Female	25.9	18.5	17.5		12.5	12.2
Tertiary education attainment	Total	11.6	14.3	17.1	28.9	32.3	33.6
	Female	12.8	16.8	18.0	31.5	35.7	37.2

(*) This headline indicator has two components and aims at: a share of early school-leavers of less than 10% (a term not synonymous with school dropout, but defined as the percentage of the population aged 18-24 with at most lower secondary education and not in further education or training) and at least 40% of 30-34 year-olds with completed university or university-like tertiary-level education with an ISCED 1997 education level of 5-6.

Source: Eurostat.

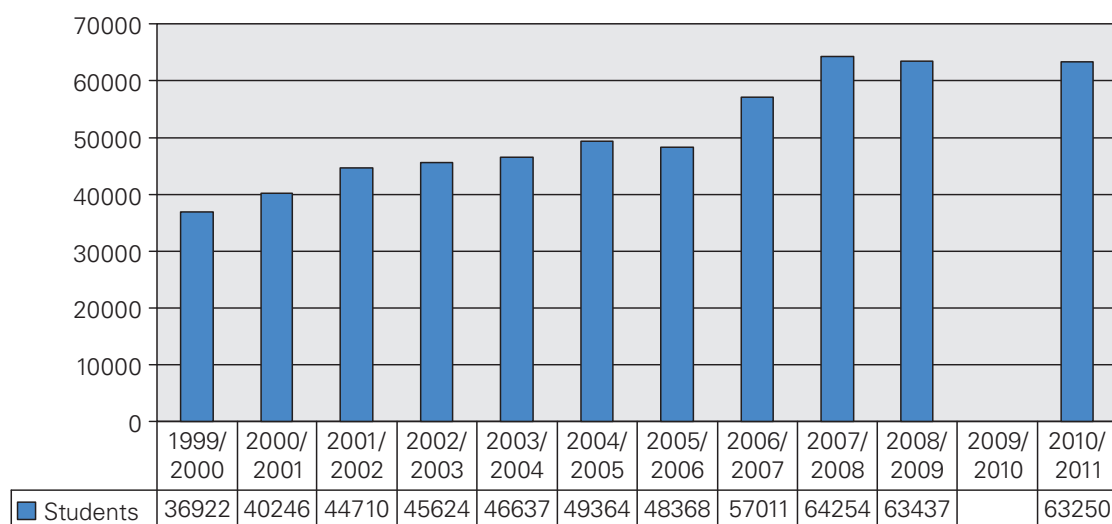
FIGURE 2.1 NET ENROLMENT RATES BY EDUCATION LEVEL, 2000-09 (%)

Source: SSO data, ETF's graph.

TABLE 2.3 NET ENROLMENT RATES BY EDUCATION LEVEL AND GENDER, 2000-09 (%)

	Pre-primary		Primary and lower secondary		Upper secondary	
	Total	Female	Total	Female	Total	Female
2000	18.02	18.17	95.71	95.08	61.18	60.50
2001	18.39	18.54	95.75	95.49	62.96	62.03
2002	18.15	18.28	94.88	94.88	62.79	61.50
2003	19.52	19.55	92.77	92.61	63.43	62.10
2004	20.07	20.04	92.53	92.37	65.96	64.27
2005	20.49	20.63	92.97	92.94	66.15	64.33
2006	12.36	12.51	90.53	90.68	66.27	63.99
2007	12.39	12.66	91.26	90.99	67.46	65.80
2008	12.78	13.01	90.74	90.82	67.32	65.31
2009	13.64	14.01	90.96	90.84	68.32	66.54

Source: SSO.

FIGURE 2.2 TERTIARY EDUCATION STUDENTS, 1999-11

Source: SSO data, ETF's graph.

TABLE 2.4 ENROLMENT IN UPPER SECONDARY EDUCATION BY TYPE OF STUDY, 2007-10

	2007/08			2008/09			2009/10		
	Total	Female	Male	Total	Female	Male	Total	Female	Male
Total	94,545	44,352	50,193	93,843	44,595	49,248	95,343	45,820	49,523
General education	38,214	20,540	17,674	38,373	20,738	17,635	38,527	20,832	17,695
Arts education	854	359	495	1,015	442	573	1,221	567	654
Vocational education	55,477	23,453	32,024	54,455	23,415	31,040	55,595	24,421	31,174

Source: SSO.

TABLE 2.5 SELECTED INDICATORS ON EDUCATION SPENDING – 'INPUTS TO INITIAL EDUCATION' SUB-DIMENSION

Indicator	Former Yugoslav Republic of Macedonia	Croatia	EU average
Annual total spending on secondary education per enrolled secondary student (EUR)	no data	1,547.9 (2008)	5,246.7 (2005)
Annual public expenditure on education as % of total government spending	15.6 (2005) 15.7 (2010)	10.3 (2008)	13.2
Annual expenditure from all sources per secondary education student as % of GDP	7.5 (2005)	18.6 (2007)	26

Source: OECD, 2010, p. 82; ETF's table.

TABLE 2.6 MINISTRY OF EDUCATION AND SCIENCE BUDGET, 2009-11 (MKD)

	2009	2010	2011
GDP	409,100,000,000	425,628,000,000	453,740,000,000
MoES total budget	20,305,267,000	19,524,091,000	21,107,567,000
as % of GDP	4.96	4.59	4.65
MoES basic budget	15,668,287,000	15,492,141,000	16,938,171,000
as % of GDP	3.83	3.64	3.73
Central budget on all accounts and users (budget bill, self-financing, loans and donations)	113,279,940,000	112,162,075,000	120,222,256,000
% of MoES total budget in the total central budget	17.92	17.41	17.56
Basic budget by budget users	99,932,938,000	99,523,055,000	107,905,235,000
% of MoES basic budget in the central budget	15.68	15.57	15.70

Source: Ministry of Education and Science, data provided in 2011.

TABLE 2.7 MINISTRY OF EDUCATION AND SCIENCE BUDGET BY USER, 2009/11 (MKD)

	2009 (amended)	% MoES budget	2010 (amended July)	% MoES budget	2011	% MoES budget
Total budget	20,305,267,000	100.0	19,524,091,000	100.0	21,107,567,000	100.0
Basic education	1,648,219,000	8.1	1,240,909,000	6.4	1,148,649,000	5.4
Secondary education	740,929,000	3.6	579,903,000	3.0	777,599,000	3.7
Adult Education Centre	0	–	0	–	8,930,000	0.0
Higher education	5,578,065,000	27.5	5,302,901,000	27.2	5,641,633,000	26.7
Student standards	877,090,000	4.3	834,800,000	4.3	868,225,000	4.1
Science	258,109,000	1.3	222,278,000	1.1	381,104,000	1.8
Decentralisation	9,900,234,000	48.8	10,460,750,000	53.6	11,366,341,000	53.8
Investment	1,037,485,000	5.1	603,207,000	3.1	679,107,000	3.2
Construction & reconstruction of primary schools	272,624,000	1.3	116,500,000	0.6	169,234,000	0.8
Construction of sports halls in primary schools	28,432,000	0.1	43,340,000	0.2	225,073,000	1.1
Construction & reconstruction of secondary schools	93,144,000	0.5	51,000,000	0.3	70,912,000	0.3
Construction of sports halls in secondary schools	320,107,000	1.6	209,597,000	1.1	155,511,000	0.7
Reconstruction of dormitories – schools	4,200,000	0.0	5,000,000	0.0	3,807,000	0.0
Reconstruction of dormitories – students	9,887,000	0.0	20,000,000	0.1	46,070,000	0.2

Source: Ministry of Education and Science, data provided in 2011.

TABLE 2.8 SUMMARY OF PARTICIPATION IN INTERNATIONAL STUDENT ASSESSMENTS, 1999-2011

		1999	2000	2001	2003	2006	2009	2011
Reading literacy								
PIRLS (4th grade)	Mean			442		442		
	Rank			26 th of 28		38 th of 45		
	Highest mean			554		565		
PISA (15 year-olds)	Mean		373					
	Level 0 (highest proportion for country)		38%					
	Level 1		28%					
	Level 2		20%					
	Comparison countries: > Peru, Albania; = Indonesia							
Mathematics and science literacy								
TIMSS (8th grade)	Mathematics country average	447			435			Assessment underway
	Science country average	458			449			
PISA	Mathematics literacy country mean		381					
	Comparison countries: > Brazil, Peru; = Albania, Chile							
	Scientific literacy country mean		401					
	Comparison countries: > Albania, Brazil, Peru; = Argentina, Indonesia							

Source: PIRLS results: NCES, 2007; PISA results: OECD, 2003; TIMSS results: IES, 2003a.

TABLE 2.9 SUMMARY OF SELECTED STATE MATURA EXTERNAL EXAMS, 2008-11

	2008	2009	2010	2011
Number of candidates	17,006	16,734	17,583	17,457
Mother tongue				
Score 1	8%	4.6%	4.8%	0.6%
Score 5	5.6%	4.8%	6.9%	14.0%
Mean score	2.79	3.11	3.15	3.67
Mathematics – basic level^a				
Score 1	28.3%	24.1%	18.7%	18.7%
Score 5	11.6%	7.3%	7.9%	16.84%
Mean score	2.52	2.52	2.64	2.94
Mathematics – advanced level^b				
Score 1	12.4%	17.2%	8.8%	12%
Score 5	21.1%	12.9%	29.4	28%
Average score	3.25	2.88	3.35	3.56
Foreign language^c				
Score 1	6.6%	9.0%	11.8%	9.5%
Score 5	28.1%	13.9%	8.6%	9.2%
Average score	3.57	3.27	2.91	3.06

Notes: Scores are given in the range of 1 to 5 where 1 is insufficient and 5 is excellent.

(a) The number of candidates for basic mathematics has fallen sharply (-40% between 2009 and 2011). The mean score has slightly improved, but remains below 3. In 2011, 40% of results were concentrated at scores 1 and 2, which is alarming given the importance of numerical literacy for the average student.

(b) Advanced mathematics has seen a shift of results towards higher scores (4 and 5), but the number of candidates has fallen from 116 in 2009, through 34 in 2010 to 32 in 2011 – a very low level.

(c) Results for the foreign language State Matura show lower polarisation between the highest and lowest scores and a consequent concentration in the middle-level scores. This could be a signal of greater homogeneity of teaching quality. There is a substantial difference in results between the various languages: in French, 60% of results are concentrated on the two lowest scores and the mean score is only 2.6; in English scores registered a decline from 2009 to 2010, with the mean score falling from 3.29 to 2.9, although there was some improvement in 2011.

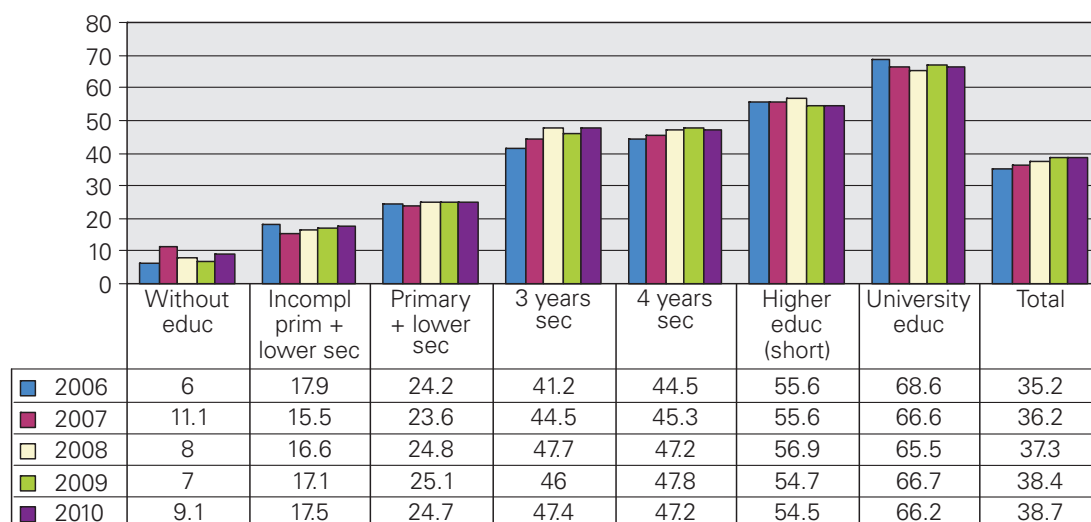
Source: State Examination Centre.

TABLE 2.10 PERCENTAGE OF COMPANIES PROVIDING TRAINING TO EMPLOYEES* BY SIZE OF COMPANY, 2009

Size of company	%
Medium	80
Large	73
Small	62
Micro	17
Average	23

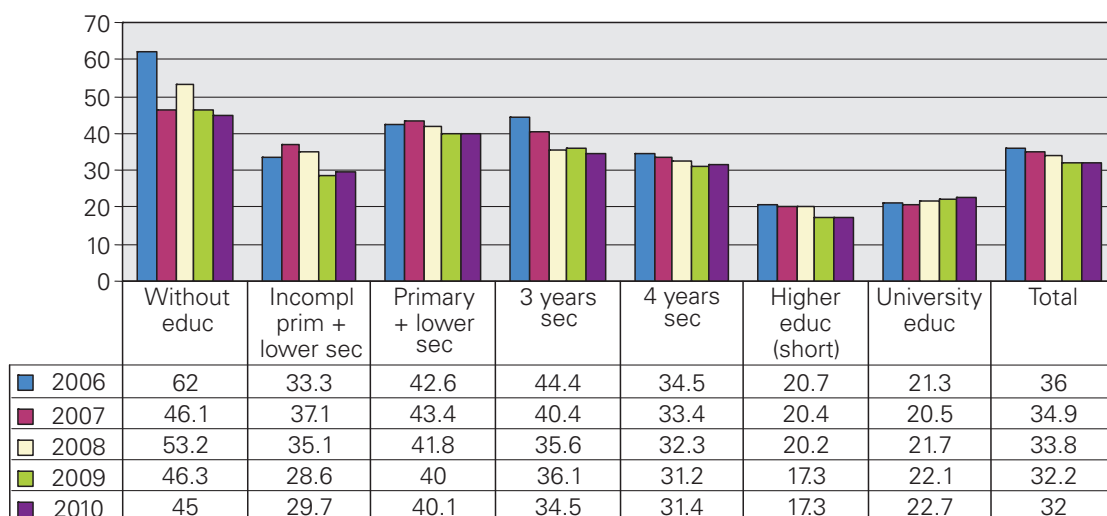
(*). Within the last 12 months.

Source: World Bank Demand for Skills Survey, 2009.

FIGURE 2.3 EMPLOYMENT RATES BY EDUCATION LEVEL, 2006-10

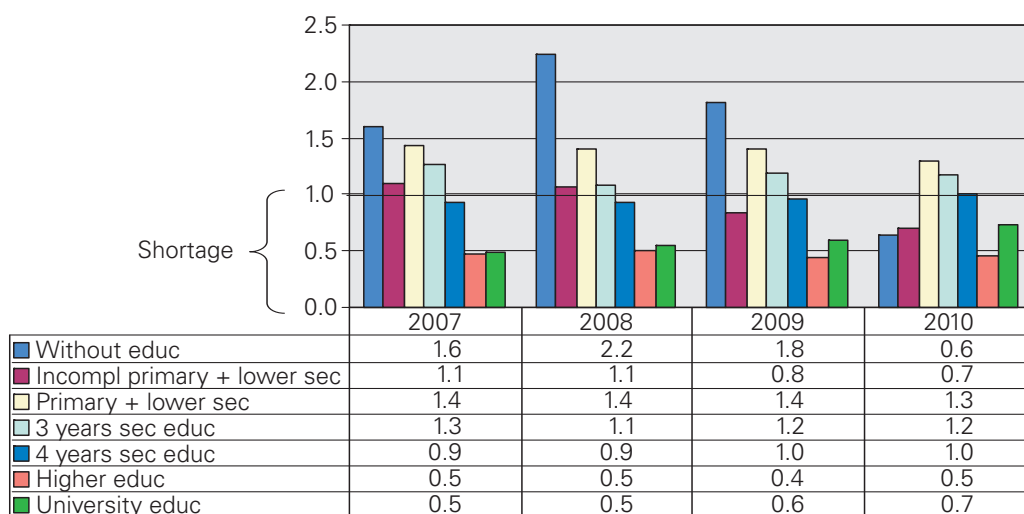
Source: SSO LFS, ETF's graph.

FIGURE 2.4 UNEMPLOYMENT RATES BY EDUCATION LEVEL, 2006-10



Source: SSO LFS, ETF's graph.

FIGURE 2.5 PROPORTION OF UNEMPLOYED VS EMPLOYED BY EDUCATION LEVEL, 2007-10



Source: SSO data, ETF's graph.

TABLE 2.11 ENROLMENT IN POSTGRADUATE STUDIES BY SOURCE OF FINANCING, 2008/09

	Total (students)	%
Enterprise	48	3.95
MoES	4	0.33
Individual	816	67.11
Other	114	9.38
Unknown	234	19.24
Total	1,216	

Source: SSO.

TABLE 2.12 PARTICIPATION OF VET STUDENTS IN PRACTICE-BASED LEARNING, 2010-12

	2010/11	2011/12
Practical training	40,466	39,787
of which VET-4 students	37,039	36,369
Summer practice	10,839	10,847
of which VET-4 students	8,891	9,066
Professional practice	3,005	2,366
of which VET-4 students	2,503	2,877

Source: MoES.

TABLE 2.13 STUDENTS IN VET BY FIELD OF STUDY, 2007-10

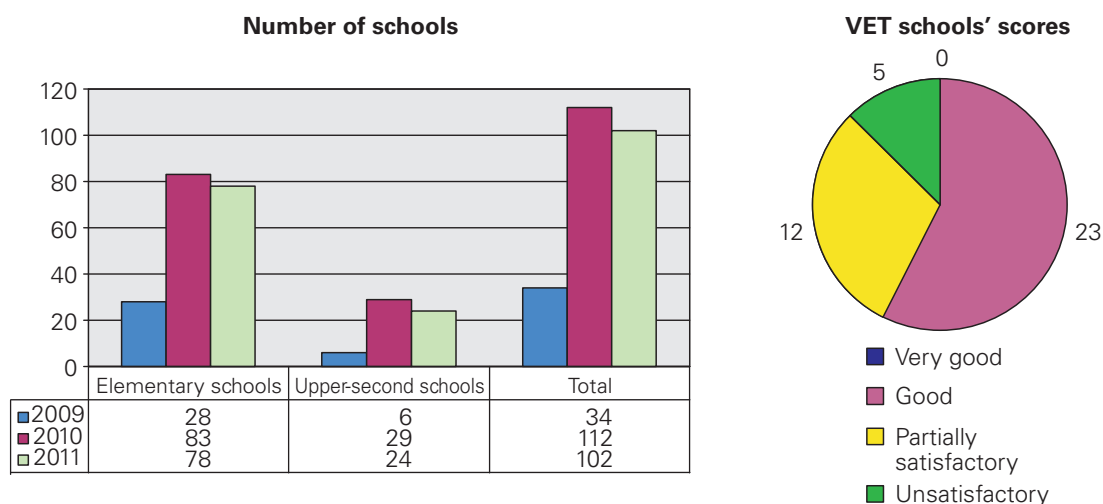
	2007/08	2008/09	2009/10	2007/08	2008/09	2009/10
	Total (students)			Distribution of students by field of study (%)		
Agriculture-veterinary	3,146	2,916	2,770	5.7	5.4	5.0
Food production	691	494	663	1.2	0.9	1.2
Wood processing	269	205	79	0.5	0.4	0.1
Forestry-wood processing	626	760	844	1.1	1.4	1.5
Geology-mining and extraction	645	561	707	1.2	1.0	1.3
Mechanical engineering	5,565	5,183	5,465	10.0	9.5	9.8
Electrical engineering	7,535	7,313	6,908	13.6	13.4	12.4
Chemical engineering	2,609	2,513	2,424	4.7	4.6	4.4
Textile processing	156	236	170	0.3	0.4	0.3
Textile and leather processing	3,076	2,818	2,613	5.5	5.2	4.7
Graphics	424	371	339	0.8	0.7	0.6
Personal services	1,340	1,486	1,656	2.4	2.7	3.0
Architecture	175	329	480	0.3	0.6	0.9
Architecture-geodesy	1,094	904	830	2.0	1.7	1.5
Transport	2,423	2,661	2,740	4.4	4.9	4.9
Travel, tourism, hotel and catering	2,539	2,584	2,556	4.6	4.7	4.6
Economics-law and trade	12,873	12,327	13,526	23.2	22.6	24.3
Health	9,773	10,223	10,327	17.6	18.8	18.6
Physical education	518	571	498	0.9	1.0	0.9

Notes: VET students as % total upper secondary.

The fields of study listed correspond roughly, but not fully, to the occupational groups established in VET-4. However, the SSO uses this data structure.

Source: SSO.

FIGURE 2.6 INTEGRAL EVALUATION RESULTS, 2009-11



Source: Letter of State Inspectorate of Education, 2011.

TABLE 2.14 GRADUATED HIGHER EDUCATION STUDENTS BY PLACE OF PERMANENT RESIDENCE, 2006-08

	2006			2007			2008			Change 2006-08 (%)
	Total	Male	Female	Total	Male	Female	Total	Male	Female	
Total	6,199	2,178	4,021	8,188	3,118	5,070	10,638	4,249	6,389	71.61
Vardar region	538	177	361	574	218	356	822	323	499	52.79
East region	567	195	372	659	270	389	833	323	510	46.91
Southwest region	623	244	379	804	324	480	1,240	519	721	99.04
Southeast region	402	141	261	484	167	317	656	243	413	63.18
Pelagonia region	917	275	642	1,277	398	879	1,313	458	855	43.18
Polog region	292	106	186	837	337	500	1,141	485	656	290.75
Northeast region	366	133	233	490	190	300	673	256	417	83.88
Skopje region	2,494	907	1,587	3,063	1,214	1,849	3,960	1,642	2,318	58.78

Source: SSO data, authors' calculation.

TABLE 2.15 GRADUATED HIGHER EDUCATION STUDENTS BY FIELD OF STUDY (ALL CYCLES), 2000-08

	University education						Doctors of Science	Master of Science and specialists	Higher education
	Total	Natural Science and Mathematics	Technical Sciences	Medical Sciences	Biotechnical Sciences	Social and Humanities Sciences			
2000	3,338	248	678	323	142	1,947	46	84	402
2001	3,180	236	573	295	132	1,944	68	156	300
2002	3,294	246	530	287	147	2,084	51	96	324
2003	4,178	280	612	306	213	2,767	59	61	226
2004	4,725	304	651	385	250	3,135	67	110	285
2005	5,132	370	659	353	301	3,449	92	198	265
2006	5,771	356	763	382	347	3,923	85	203	442
2007	7,835	407	915	406	374	5,733	82	277	525
2008	10,027	594	1,209	564	297	7,363	87	272	811
Change 2000-08 (%)	200.39	139.52	78.32	74.61	109.15	278.17	89.13	223.81	101.74

Source: SSO.

TABLE 2.16 MISMATCH BETWEEN AREA OF STUDY AND SECTOR OF EMPLOYMENT FOR POSTGRADUATE STUDENTS, 2008/09

Sector of employment	Area of study							
	Total	Natural science and mathematics	Technical & technological sciences	Medical sciences	Biotechnical sciences	Social sciences	Humanities	Unknown
Total	1,216	145	208	15	17	688	142	1
Agriculture, forestry and fishing	7	1			5	1		
Manufacturing	17	3	10			4		
Electricity, gas and water supply	9	3	5			1		
Construction	70		67			3		
Wholesale and retail trade	23	3	6			13	1	
Hotels and restaurants	6	1				5		
Transport and communication	9		5			4		
Financial intermediation	46	4	1			40	1	
Real estate	22		12			9	1	
Public administration	85	14	17			53	1	
Tertiary institutions	51	14	5	2	4	13	13	
Secondary and primary schools	112	22	5		2	41	42	
Public scientific institutions	9	2				3	4	
Culture	26	2	1		1	8	14	
Health and social work	40	13	1	7		18	1	
Other social activities	26	2	10	1		10	3	
Domestic service	13	3	3			6	1	
Extra-territorial organisations	19	2	1			16		
Unemployed	341	39	43	3	4	214	38	
Unknown	285	17	16	2	1	226	22	1

Source: SSO.

TABLE 2.17 CENTRE FOR ADULT EDUCATION BUDGET BREAKDOWN, 2009-11 (MKD)

	Wages	Goods and services	Capital expenditure	Total
2009	2,520,868	3,067,500	2,210,000	7,798,368
2010	6,587,682	6,260,170	533,771	13,381,623
2011	3,077,000	5,777,000	76,000	8,930,000

Source: Centre for Adult education, at ETF request.

3. KEY POLICY ISSUES, STRATEGIES AND CHALLENGES IN EMPLOYMENT

3.1 CHARACTERISTICS OF THE LABOUR MARKET

The economic transition was marked by large-scale restructuring of the economy and a corollary contraction in production and employment with a shift of output to the services sector.

Given the country's limited involvement in world financial and economic structures, the economy was spared a major negative impact from the global financial and economic crisis. However, the continued worsening of the eurozone crisis is expected to negatively affect growth in 2012.

According to data from the SSO, published on 15 June 2012, the labour force totalled 941,019 individuals in the first quarter of 2012, of whom 297,351 (31.6%) were unemployed. The activity rate in this period stood at 56.4%³⁰.

Labour market participation

TABLE 3.5 shows activity rates and employment rates are slowly but steadily increasing, growing from 62.8% in 2007 to 64.2% in 2010, mainly as a result of an improved male activity rate, up from 74.8% in 2007 to 77.7% in 2010. Conversely, female activity remains at a low of 50.4% (2010).

Mojsoska-Blazevski (2011) attributed the persistent low activity level to three elements: the very low number of employed people, only partially compensated by the high incidence of unemployment; the impact of sizeable net inflows of remittances from migrant workers that increase the reservation wage of recipient households or individuals; and low female participation. The latter component is further compounded by the traditionally weaker participation in the labour force of women from particular ethnic groups.

Activity rates are higher among the prime age group of 25-49 year-olds³¹, showing a continuous increase from 79.0% in 2007 to 80.4% in 2010. However, the biggest leap in figures is seen among 50-64 year-olds, up almost 5%, from 52.9% in 2007 to 57.5% in 2010.

Youth activity rates demonstrate that only one in three youngsters in the 15-24 age group participate in the labour

market. **TABLES 3.15** and **3.16** show there has been a slight but steady decline in youth activity rates since 2007, down to 33.3% in 2010. Young males had participation rates of 42.2% in 2010 – a rate far higher than the 24.0% for female youth active in the labour market in the same period.

Youth inactivity rates have increased constantly from 64.1% in 2007 to 66.7% in 2010, and female youth inactivity is consistent with patterns in activity rates, being far higher than male inactivity. Several assumptions can be made to explain this phenomenon among young women, including factors such as: continuing with education; being discouraged from looking for a job; financial support from remittances; and social or family conventions on the female role in the household. However, further research into the reasons for such labour market behaviour would be required before these features could be accepted as facts.

Total employment

Although the former Yugoslav Republic of Macedonia traditionally had low employment, the impact of labour market transition exacerbated historical trends before a slight upward tendency in the last few years.

TABLES 3.4, 3.5 and **3.6** show total employment increased from 590,232 in 2007 to 637,855 in 2010 and the employment rate increased slowly from 40.7% in 2007 to 43.5% in 2010. This rate leaves the former Yugoslav Republic of Macedonia lagging far behind the EU-27 average of 64.2% in 2010³² and falling short of the target of 48% set in the National Employment Strategy for 2010.

Net employment growth is also low: at 3.2% in 2008, increasing slightly to 3.4% in 2009, but down again to 1.3% in 2010. This suggests there is a major job creation issue in the country, as **TABLE 3.1** confirms.

Employment by gender and level of education

More dynamic growth was seen in male employment; a sector that grew by 4% in the last four years to reach 52.8% in 2010. In contrast, female employment sank to a low of 34.0% in 2010. This figure is far below the EU-27

³⁰ SSO website. Last accessed 22 August 2012 at: www.stat.gov.mk/PrikaziSooopstenie_en.aspx?rbrtxt=98

³¹ Quarterly LFS allows comparability only for the 25-49 age group, rather than 25-54.

³² Eurostat, Employment Database. Last accessed 24 May 2011 at: <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&language=en&pcode=tsiem010&tableSelection=1&footnotes=yes&labeling=labels&plugin=1>

average of 58.2%³³ for 2010 and, again, did not meet the 38% target set in the National Employment Strategy.

The increase in female employment in 2010, particularly in the third and fourth quarters of 2010, can be attributed mainly to the expansion of the employment of women in the public sector, notably in education, as well as in agriculture, while male employment grew mostly in the service sector.

The employment rate of females with tertiary education is more than double the total female employment rate, indicating that female employment is closely associated with a higher level of education and related better job opportunities. Employment rates for women with a medium level of education also largely surpass the total gender specific indicator. Lower education levels are associated with lower employment rates, but **FIGURE 3.1** shows this difference is particularly sizeable for females.

Employment by sector

Another salient feature of the national labour market, which also reflects the completion of transition, is that the private sector has gained ground in its share of employment. The share of public sector employment declined by almost 10% from 43.2% to 33.9% between 2004 and 2006. This trend persisted, except for during the 2009-10 period when 2,000 people were hired in the public sector, 1,500 of them in education as can be seen in **TABLE 3.6**.

A breakdown of employment by economic sector for 2010 shows agriculture and services contributed most to the creation of new jobs with an approximate total of 8,000 posts, but this does not indicate any potential within these two sectors to create quality, non-vulnerable jobs.

TABLE 3.7 shows agriculture provided a substantial 19% of jobs in 2010, but a European Commission document (2011b) showed the sector contribution to GDP in 2009 to be a relatively small 11.2%, reflecting a recognised problem of low productivity.

Rising employment in the agricultural sector has been a common feature for many transition economies, exacerbated during the crisis years when people resorted to subsistence farming to make a living. The jobs provided under such conditions tend to be precarious.

Alongside the problems with agriculture, the services sector visibly increased its contribution to both gross added value (from 58.5% in 2007 to 67.4% in 2009) and employment (up to 52% in 2010). However, closer analysis reveals this upward movement could be attributed primarily to the new jobs offered in public administration and the creation of around 1,500 private sector posts in real estate that boosted employment in

the services sector. There was a general contraction of jobs in other areas of services with 2,400 employees lost from transport and 500 from the wholesale and retail trade.

The industry share in employment had already been in continual decline since before the crisis years, but further contraction occurred from 31.3% in 2008 to 29% in 2010. In contrast, the share of construction in employment remained relatively stable at between 6.4% and 6.5% from 2007 to 2010.

TABLE 3.8 shows the evolution of types of employment over the same period with an increase of almost 30,000 persons in the employee category, although the weighting of this group contracted slightly to 71.5% in 2010. Almost a third of the employee category were women in 2009.

The employer category also increased up to 5.4% in 2010; a category mainly made up of men (78% of the total).

Finally, self-employed and unpaid family workers together represented more than 23% of all the employed, and **Table 3.8** shows how the shares of these categories have increased constantly over the 2007-10 period. Almost a quarter of the jobs available in the labour market can be classed as 'vulnerable' according to the ILO definition of 'vulnerable jobs', although it is worth mentioning that the share of vulnerable jobs in female employment has shown a constant decrease³⁴.

Part-time and seasonal employment

Part-time jobs are still not attractive for many workers, mainly due to the low wages on offer. According to a 2007 World Bank study, one third of part-time workers work do not deliberately choose to work in such jobs, accepting shorter hours in response to poor job supply. Data from 2009 indicate that part-time work accounts for a share of just over 5% of total employment; a rate notably lower than the EU-27 average of 18.1% (Eurostat, 2009). Women part-time workers outnumber men at 6.6% to 4% respectively³⁵, and Mojsoska-Blazevski (2010) states that the change in legislation related to social contributions for part-time workers had only a weak impact on the labour market.

In addition, extensive use is made of fixed-term contracts as a device to control social payments, and Eurostat figures for 2009 state that 15.9% of contracts in the country were of this type; a rate significantly higher than the EU-27 average of 13.5%. More women than men are in fixed-term jobs.

ESA records given in **TABLE 3.9** also support this finding, showing the percentage of temporary and seasonal jobs increasing from 57.6% in 2008 to 62.4% in the first five

³³ Eurostat, Employment Database, Female Employment. Last accessed 24 May 2011 at: <http://epp.eurostat.ec.europa.eu/tgm/refreshTableAction.do?tab=table&plugin=1&pcode=tsiem010&language=en>

³⁴ LFS 2010 Quarterly News releases do not disaggregate types of employment by gender.

³⁵ Eurostat, 2011.

months of 2011 (and a total of over 144,000 persons in 2010). Conversely, the percentage of registered indefinite contracts decreased from 41.3% in 2008 to 37.6% in 2011, becoming the basis of employment for less than 88,000 individuals in 2010.

A temporary work agency has been in operation since 2006 with an estimated total of 10,000 workers and, hence, a limited impact on the labour market.

Youth employment

Youth employment rates (for the 15-24 age group) have remained stable at around 15% since 2007, standing at 15.4% in 2010, although there is a sizeable difference in terms of gender. While male youth employment amounted to 19.5% in 2010, female youth employment was only 11.2%, for the same year for the same reasons cited for female youth inactivity indicated earlier.

Informal employment

Informal employment is defined by the SSO as those workers 'not registered with the national employment agency or the national pension scheme' (Novkowska, 2009), but estimates of the true figure vary. The SSO itself stated that informal employment declined from 28.6% in 2008 to 27.0% in 2009, although it was much more wide-spread in the agricultural sector than any other, at a rate of 58% in 2007. Less women than men are estimated to work in informal jobs, at 24.1% to 28.7% in 2009.

However, non-registration is only one way of calculating informal employment, and underreporting is also an issue. According to a recent USAID report from 2011, quoting World Bank sources, informal employment could altogether involve up to 50% of the total labour force.

Total unemployment and gender breakdown

Unemployment was high even before the disintegration of the former Yugoslavia. However, the ensuing economic and labour market transitions have resulted in a further increase in the unemployment rate to settle at the second highest figure for Europe. Despite a decrease from 35.4% in 2007 to 32% in 2010, figures for the former Yugoslav Republic of Macedonia look extremely high against an EU-27 average of 9.6% in 2010³⁶.

There is not much gender difference in unemployment, with figures for both groups standing at around 32%. One reason for this is that the female unemployment rate has fallen more than the male rate in the last four years – down 3.3% and 2.7% respectively – partially as a result of increased employment in the public sector, notably in education.

Long-term unemployment

TABLE 3.10 shows that long-term unemployment is among the highest in the region and the EU-27. This poses a big challenge as more than 80% of total unemployment has been of this type since 2007. In the words of Mojsoska-Blazevski et al. (2009, pp. 53-54) this in essence means that 'virtually all unemployed face difficulty in finding a job'.

In 2010, the share of long-term unemployment hit 83.1%; up a further 1.5% on the previous year (see **TABLE 3.11**) and high across all age groups. Labour Force Survey (LFS) results from 2007, 2008 and 2009 show that the share of people unemployed for more than four years has also been very high, up from 65.0% in 2007 to 67.1% in 2008, but down again to 63.8% in 2009. The male share in long term unemployment has always been dominant, floating at around the 60% mark.

LFS data cannot be easily compared with ESA records, as the ESA registers also include unemployed people not actively looking for work but who have registered in order to benefit from free health insurance (see Section 3.6 for further discussion of this issue).

Unemployment by level of education

As a rule, higher levels of education pay off in terms of reduced levels of unemployment, with the one exception of graduates from four-year upper secondary education who make up a large proportion of the total unemployed or inactive people, while also forming the largest group among the employed.

The share of unemployed people with ISCED levels 0-2 has been declining; down from 41.7% in 2006 to 38.6% in 2009, while the share of unemployed people with ISCED levels 3-4 is lower; at 32.3%, with a slight gender difference. Unemployment among higher education graduates has always been lower in comparison with the other ISCED groups and has followed a downward trend between 2006 (21.2%) and 2008 (19.3%).

However, this positive trend was reversed in 2009, bouncing up again to 21.3%, with a clear gender difference: at 17.7% for men with university education in 2009, against 24.8% for their female peers. This confirms the aforementioned finding that university education increases chances of labour force participation, although the risk of unemployment is still high, much more so for female than male university graduates (**FIGURE 3.2**).

Youth unemployment

Youth unemployment is constantly decreasing but is currently the highest for any of the Western Balkans and Turkey, with rates falling from 57.7% in 2007 to 53.7% in 2010, against an EU-27 of 20.9% in 2010.

There is almost no gender difference in youth unemployment. One of the reasons for the decline in youth unemployment is increasing youth inactivity rates due to delayed entry to the labour market and continued education and training.

3.2 LABOUR LAW AND INDUSTRIAL RELATIONS

Industrial relations are regulated mainly under the Law on Labour Relations amended in 2005 (Official Gazette No 62/2005). Apart from making employment more flexible and increasing employment opportunities, this law includes provisions on trade unions and employers' associations as well as collective agreements and strikes. The scope of the law is comprehensive in that it covers all employees, including public servants, independently of their status and the size of the enterprise (Articles 3 and 4). EU legislation on anti-discrimination and gender equality has been transposed. The law contains most of the *acquis communautaires* concerning the information and consultation of workers; the protection of young people at work; employers' obligations vis-à-vis employees as stipulated through work contracts; part-time and fixed-term work; the protection of employees in case of transfer of undertakings or collective redundancy, as well as working hours.

The law does not define the 'worker-employee representative', although it accepts that employee representatives are to be informed and consulted. The law stipulates that employment contracts for fixed-term workers can be extended for up to five years, which can result in an abuse of the social rights of fixed-term employees.

A closer analysis of employees' rights shows that some provisions contradict the Fundamental Rights Charter, particularly in the case of Article 28 regulating the right of collective agreement and action. Trades unions must pass over three thresholds prior to recognition of their representativeness and entitlement to enter into collective agreements with employers (Article 212).

In 2006, the Law on Temporary Work Agencies (Official Gazette No 49/2006) was enacted for the purpose of creating more employment opportunities through flexible labour legislation. However, no study has been conducted so far on the impact of the temporary work agency on the labour market. Such a study would also need to focus on the basic social rights of temporary agency workers and assess whether protection is provided through labour inspections or at judicial level.

The country has ratified 70 ILO Conventions including eight fundamental conventions and four governance conventions. ILO Conventions 87 and 98 in particular conflict with the provisions of the 2005 Law on Labour Relations.

Amendments to this Law on Labour Relations brought the country into the category of countries with 'flexible employment protection legislation'³⁷. However, the limited impact of this law on the labour market contradicts the argument that strict employment protection legislation hinders the effective functioning of the labour market and limits employment opportunities.

3.3 ACTIVE LABOUR MARKET POLICIES AND ACTIVATION MEASURES

The transition process has had a major impact on skills requirements within the economy and has affected the employability of people at various levels of qualification. As a consequence, active labour market policies (ALMPs) have gained in importance with pilot projects launched in 2004 prior to ALMPs becoming operational on a national scale in 2007.

The Ministry of Labour and Social Policy has recently used ALMPs to target the demand side in particular, providing support for self-employment, small and medium-sized enterprises (SMEs) and subsidies for disadvantaged groups and others. This can be considered a reasonable move given the low capacity for job creation within the economy.

The budget allocated for ALMPs was highest in 2009 at 0.20 % of GDP, up from 0.07 % of GDP in 2008, when the government used ALMPs to cushion the negative effects of the crisis in the labour market. The ministry turned its attention to women, the long-term unemployed, young people, Roma and other ethnic communities mostly by increasing schemes of public works. However, the budget for ALMPs was reduced again to 0.13 % of GDP in 2010 and to 0.11 % of GDP in 2011, leading to the removal of public works schemes and others from the range of active measures offered (see **TABLES 3.17-3.19**).

Data for the country compare highly unfavourably to the EU-27, where total spending on ALMPs stands at an average 1.68 % of GDP.

Major emphasis is placed on the training or retraining of registered unemployed people in current ALMPs delivered directly by the ESA or accredited training providers, mostly in the public VET schools, and the bulk of the training provided in 2011 was delivered in Skopje. Other ESA measures include: support to the self-employed; the formalisation of informal jobs through subsidies; subsidized employment; and internship programmes.

However, given the scale of unemployment in the country, ESA measures only reach a small proportion of unemployed people. The 2011 National Action Plan for Employment, for example, envisaged training or retraining for a total of just 4,906 people registered unemployed,

³⁷ The OECD employment protection indicators are compiled from 21 items covering three different aspects of employment protection: individual dismissal of workers with regular contracts, additional costs for collective dismissals, and regulation of temporary contracts. Last accessed 25 May 2011 at: www.oecd.org/document/11/0,3746,en_2649_37457_42695243_1_1_1_37457,00.html

with 2,000 of the places offering only basic business skills with the ESA or the National Agency for the Promotion of Entrepreneurship.

Other measures are planned to reach a further 3,000 unemployed people altogether, including: a self-employment programme for 1,000 participants; formalisation of unregistered firms for 250 individual cases; subsidized employment for 855 people; internships for 300 young people; a Roma employment programme for 34 individuals; and economic empowerment of female victims of domestic violence for 70 women.

According to information from the ESA, by the end of 2010, applications from 3,093 employers had been approved for the subsidized employment of 3,698 persons. The results of this programme will need close monitoring to assess how many people remain in employment after one or two years.

Career guidance and counselling – considered the most effective and cost-efficient ALMM by Jackman and Corbanese (2007) – are covered in the New ESA Service Model Handbook but while some measures have been applied, they are not considered a main policy focus within the entity, mainly as a result of inadequate staff capacity.

A World Bank report from 2008 noted that only half of all ESA officers that year were ‘front-line employment counsellors’, meaning that over the 2008-10 period, the entity provided professional career orientation to 69,390 people and supplied job club services to 51,725 unemployed individuals.

The internship programme, meanwhile, targets unemployed higher education graduates, but experts from the United Nations Development Programme (UNDP) who evaluated this programme found it largely ineffective as most of the young people returned to unemployment within one year of their internship.

The EU Community Assistance for Reconstruction, Development and Stabilisation (EU CARDS) programme supported ESA and local employment policies with three successive projects from May 2003 to December 2008. A new ESA service model has been in place since 2009, also with the support of an EU-funded project. According to Mojsoska-Blazevski et al. (2009), this new service model includes:

- uniform services provided by all local offices;
- standardised work methods;
- an open office for increased use of self-service tools (CV database, vacancy database, etc.);
- reliable labour market information;
- ALMPs for various target groups;
- local development plans updated annually.

All ESA staff were provided with training under the EU project but staff caseloads are unmanageable. Staff capacity must be increased to respond better to the

needs of the unemployed and to integrate or reintegrate them into the labour market.

The measures planned under the IPA Operational Programme for Human Resources Development 2007-13 are listed below.

- *Measure 1.1 – Further development of the Employment Agency and enhancement of the employment conditions*, to improve the quality, efficiency and effect of services provided by the Employment Agency with a view to reducing unemployment and preventing people in employment becoming unemployed.
- *Measure 1.2 – Support to the implementation of the Employment Strategy and Joint Assessment Paper*, to strengthen the capacity of bodies, institutions and social partners in the area of creating and managing policies for employment in addition to implementing and monitoring the Employment Strategy.
- *Measure 1.3 – Tackling the situations of young people, women and the long-term unemployed in the labour market*, to integrate young people in the labour market, to reduce and prevent long-term unemployment (over four years) in addition to increasing the employment rate of women through the three components of: internships in support of first employment of young persons up to the age of 27 years (involving 512 graduates); generic skills training (involving 6,600 unemployed individuals³⁸); and training for skills demanded on the labour market (involving 820 people primarily in electrical installations, mechatronics, catering services, welding, construction and ICTs).
- *Measure 1.4 – From informal to formal*, decreasing the number of people engaged in the grey economy and thus contributing to increased levels of formal employment and the overall economic development in the country.

Since 2006, the ESA has been conducting skill needs analyses to capture employers’ short-term needs in the first instance. These analyses could be combined with longer-term forecasts and also be better used across institutions to inform decisions on training provision for young people and adults.

These skills needs analyses were used to strengthen cooperation with employers and the ESA responded in 2010 with the establishment of a new information service known as the Contact Centre that provided support for employers and job seekers by offering information on employment opportunities.

Monitoring and evaluation of ALMPs has been introduced with the help of the UNDP. In this context, the ESA is in the early stages of developing tools for monitoring the effectiveness and efficiency of labour market training by means of questionnaires and interviews via the local employment offices. However, it is not clear whether objective criteria are being applied to monitor the quality

38 This figure includes 250 women and long-term unemployed people who will be given entrepreneurship training, 350 people to be trained in communication skills, 3,000 people to be taught foreign languages and 3,000 ICT skills.

of training courses or whether the latter are actually having an impact on the labour market.

Activation policies for inactive and unemployed people in the former Yugoslav Republic of Macedonia are generally hampered by the relative inertia of the job market, by the high level of informal employment and by the way many people accumulate a range of social benefits that they combine with income from informal sources to help them make ends meet (Crnkovic-Pozajic, 2011).

Other problems include that only a low percentage of unemployed people are able to benefit from ALMPs and these are insufficiently intense due to major budget constraints. Also, ALMPs concentrate on single, standard measures, rather than being packaged and tailored to suit the needs of individuals and to help them integrate or reintegrate into the labour market. Finally, ALMPs are primarily provided in the capital city of Skopje, while they may well be needed most among people living in other areas.

3.4 UNEMPLOYMENT BENEFIT AND SOCIAL SECURITY SYSTEM

The national unemployment benefit system is regulated by the Law on Employment and Insurance, which provides stringent entitlement rules. To qualify:

- The person should be registered with the employment service.
- The employer should have paid premiums of 1% (reduced from 1.4% in 2009) of the total net wage of the employee into the Unemployment Insurance Fund (administered by the Public Revenue Office).
- The person should have worked continuously for at least 9 months or 12 months with breaks in an 18-month period.

After this, the benefits are granted for a period ranging between 3 and 12 months. On 31 December 2010, 24,263 registered unemployed individuals were receiving unemployment benefits; a figure that corresponded to only 7.5% of the total number of registered unemployed.

Mojsoska-Blazevski (2011) argues that this low rate of unemployment benefit receivers reflects that: a high proportion of unemployed people do not have any prior work experience and so can be classed as first time job-seekers; there is a high share of long-term unemployed people in total unemployment who were unsuccessful with job searching and who have exhausted their eligibility; and many registered unemployed people are actually inactive or informally employed and have no 'official' work experience.

3.5 JOB CREATION, BUSINESS ENVIRONMENT AND COMPETITIVENESS

The net employment growth indicator clearly demonstrates that economic transition and growth have not led to a corresponding growth in jobs.

This is partly due to the lack of a well-qualified labour force, which is in turn conditioned by the low level of productivity and lack of competitive pressures, and by the modest performance of an education and training system that does not always provide the skills needed for a modern economy.

The government has made efforts to reverse this trend through investment in education (particularly higher education) and amendments to labour legislation with the introduction of greater flexibility to suit employers' needs and enhance job opportunities. However, experts such as Kjosev (2010c) have stated that this enhanced flexibility should not be viewed as a 'panacea' for job creation.

The low levels of job creation are also partly due to the high number of SMEs. In 2006, SMEs accounted for 98.7% of all enterprises registered with the Central Registry; they contributed 54.3% of GDP and provided 78.4% of all employment. Most of these enterprises can in fact be better classified as small or micro companies, mainly operating in the wholesale and retail (43.9%) or manufacturing sectors (14.5%).

These are often family businesses with a low potential for business and employment growth. A report on SMEs in the country points to a lack of financial capital and management experience that makes most of the SMEs highly vulnerable (OECD et al., 2009).

The Ministry of Economy aimed to abolish investment barriers and ease foreign direct investment through its Programme for Stimulating Investment in the Republic of Macedonia 2007-10. In addition, the Department for Entrepreneurship and Competitiveness within the ministry designed a Programme for the Development of Entrepreneurship, Competitiveness and Innovation of Small and Medium Enterprises 2007-10. An SME Observatory was established to gather and analyse data, compile information and produce indicators for regular feedback to the government and to inform policy making. In 2003, an Agency for the Promotion of Entrepreneurship was set up with the support of foreign donors and this has successfully implemented a number of training and other SME support programmes.

Some issues related to the effective monitoring and evaluation of the SME strategy remain to be resolved in terms of assessment of the desired results and informing of further policies. Also, cross-institutional consultation mechanisms need be improved and SMEs in general require more support, including information on how to access credits and how to approach business-related aspects such as taxation and the law.

In August 2010 an EU project to enhance competitiveness was launched under the leadership of the EBRD. A total of 20 SMEs were selected to receive specific support³⁹. Results from this pilot project could provide the basis for the mainstreaming of effective policies across the entire SME sector.

The government reduced labour costs by decreasing the rate of social security contributions payable from 32% before 2009 to 22% in 2011 in efforts initially aimed at easing job creation. These initiatives were later viewed as a way for firms to cut production costs and keep employment stable in response to the crisis (Kjosev, 2010a, p. 3).

A more recent trend has seen the establishment of new firms owned by Greek businesses with the most attractive investments apparently in the processing and production of agricultural products, furniture, chemical household products and textiles⁴⁰. Several Municipalities including Bitola and Strumica report good prospects of job creation led by these companies.

3.6 POLICY FRAMEWORK AND INSTITUTIONAL SET UP IN THE EMPLOYMENT POLICY FIELD

Labour ministry

The Ministry of Labour and Social Policy is the institution responsible for policy making on employment, while implementation of the employment policies, including ALMPs and passive employment policies, is the responsibility of the Employment Service Agency that operates under the auspices of the ministry.

The Department for Labour, also within the ministry, is responsible for labour legislation and monitoring developments in the labour market. That department has recently been trying to develop a skills-needs forecasting mechanism for the labour market. It has 14 experts working on the task, but additional staff are required.

The ministry also prepares the national employment strategy and action plans. The National Employment Strategy for 2005-10 had been drawn up around the EU Integrated Guidelines for Growth and Jobs and EU objectives and targets for employment. The planned target of an employment rate of 48 % in 2010 was not reached.

The UNDP actively supported the ministry in drafting a National Employment Strategy for the period to 2015 and the National Action Plan for Employment 2011-13, taking EU employment objectives and 2020 targets into consideration. National targets include a 55% increase in the employment rate for the 20-64 age group by 2015.

This is still much lower than the EU target of 75% by 2020, but we consider this target realistic within national trends and possibilities. The more worrying fact is that these national targets have been set with no prior analysis and research.

Most of the relevant stakeholders, including social partners, were able to participate in designing the national action plans on employment, but the Ministry of Economy, which is another key institution, was not involved in the process. Staff capacity at the Ministry of Labour and Social Policy must be further strengthened, particularly on labour market policy and labour regulation issues.

Labour inspectorate

Direct responsibility for the fight against informal employment lies with the Labour Inspection Board which had 112 active inspectors at the beginning of 2011. A project operating under the IPA Multi-annual Operational Programme for Human Resources Development and entitled 'From informal to formal' will help increase the capacity of this institution by strengthening human and material resources, as well as the coverage of annual inspections.

Other tasks related to the labour inspectorate are listed among the core tasks of the ESA, including: the registration of unemployed individuals; the administration of unemployment benefits; the registration of job vacancies, new employment contracts and the termination of these; counselling and job matching; the collection and provision of labour market information; and the management of ALMMs (Feiler et al., 2009). The ESA also carries out skill needs analyses on an annual basis.

Public employment service

ESA structures comprised 30 local employment offices with a total of 513 staff at the beginning of 2011, 54 of whom worked in central administration. Skopje's local employment office is the biggest, with 95 employees. At the end of 2010, there was one member of staff for every 619 unemployed people, but when the actual number of ESA job counsellors is considered, caseloads increase to over 1,000 per member of staff. A World Bank report from 2008 gave an even higher estimated caseload per job counsellor of more than 1,300 on the basis of 2007 data (World Bank, 2008).

The same 2008 report also recommended that ESA staff should be freed from certain tasks in order to allow them to concentrate on their primary objectives, with particular reference made to administration of the health insurance scheme. This function was transferred to the Health Insurance Fund in 2010, considerably reducing ESA workload. However, people still need to register with the ESA in order to benefit from free health insurance.

³⁹ Further details can be found on the Ministry of Economy website. Last accessed 30 May 2011 at: <http://80.77.145.101/default-en.asp?ItemID=73B27E548E1C1546B7B0BBE84E2859F9>

⁴⁰ See www.setimes.com/cocoon/setimes/xhtml/en_GB/features/setimes/features/2012/02/20/feature-02. Last accessed 28 February 2012.

In early 2010, the USAID Business Environment Activity provided support for the ESA to launch an Integrated Software Solution that provides job-seekers with the ability to: access information on the jobs available; seek information on the types of employees currently in demand in the labour market; research a variety of professions; find out which are the skills currently required by employers and the level of average current salaries; and seek guidance on career development. The system also shortens and eases the recruitment process for employers as they will be able to post job advertisements and access résumés online (Kjosev, 2010b). This software will effectively operate as a central information source for both employers and jobseekers in a way that contributes to an improved matching process.

Social dialogue

Social dialogue has been strengthened through the provisions of the Labour Law. In 2010, the government and social partners signed an agreement to widen the

scope of the Economic and Social Council, expanding its consultative role to provide opinions on draft bills, strategies and action plans. There are 12 members; each side appoints four members for a term of four years. The Council can then create working groups on specific issues.

As a result, the Economic and Social Council has become the appropriate platform for organising social dialogue at national level; it met five times in 2010 mainly to discuss economic and social policies including amendments to the Law on Labour Relations in the wake of the global economic crisis.

Although social partners have been involved in the preparation of strategy papers and action plans, the timing and intensity of their involvement must be improved. Their contributions could also be very valuable at times such as the preparation phase, when they could submit sector analyses or help monitor the effects of employment policies.

STATISTICAL TABLES AND FIGURES

TABLE 3.1 NET EMPLOYMENT GROWTH, 2008-10 (%)

	2008	2009	2010
Net employment growth	3.2	3.4	1.3

Source: SSO LFS data, authors' calculation.

TABLE 3.2 SHARE OF THE WORKING-AGE POPULATION BY EDUCATION LEVEL, 2004 & 2010 (%)

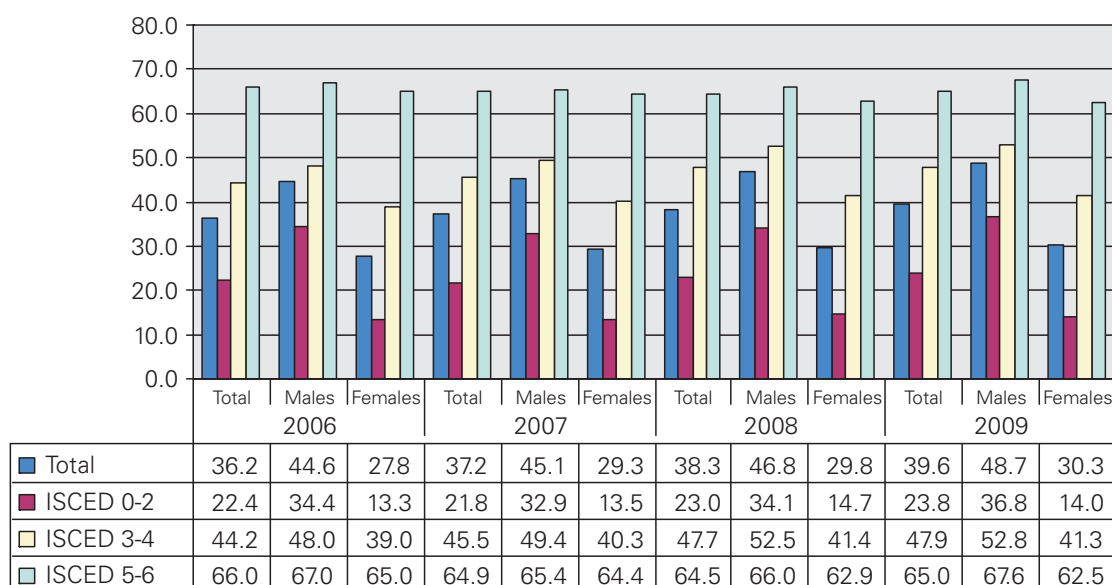
	2004	2010
No education	4.06	2.5
Incomplete primary education	10.08	8.5
Primary education	33.57	32.0
Secondary education – 3 years	9.38	9.6
Secondary education – 4 years	32.63	34.4
Higher education	3.09	2.7
University level education	7.19	10.3

Source: SSO data, authors' calculation.

TABLE 3.3 SHARE OF THE LABOUR FORCE BY EDUCATION LEVEL, 2004 & 2010 (%)

	2004	2010
No education	1.1	0.7
Incomplete primary education	4.7	3.7
Primary education	24.8	23.2
Secondary education – 3 years	12.3	12.2
Secondary education – 4 years	41.2	41.5
Higher education	4.2	3.2
University level education	11.6	15.5

Source: SSO data, authors' calculation.

FIGURE 3.1 EMPLOYMENT RATES (15-64) BY EDUCATION LEVEL AND GENDER, 2006-09 (%)

Source: Eurostat LFS data, ETF's graph.

TABLE 3.4 LABOUR MARKET TRENDS (15-64) – ABSOLUTE NUMBERS, 2007-10

	2007	2008	2009	2010
Total non-institutional labour force	1,432,851	1,434,800	1,439,481	1,447,957
Labour force	899,256	911,601	921,055	930,074
Employed	582,604	601,883	623,127	637,855
Unemployed	316,652	309,719	297,927	299,920
Inactive	533,595	523,199	518,426	517,883

Source: SSO LFS.

TABLE 3.5 LABOUR MARKET TRENDS (15-64) – RATES, 2007-10 (%)

	2007	2008	2009	2010
Labour force participation rate	62.8	63.5	64.0	64.2
Employment rate	40.7	41.9	43.3	43.5
Unemployment rate	35.2	33.6	32.2	32.0
Inactivity rate	37.2	36.5	36.0	33.8

Source: SSO LFS.

TABLE 3.6 PUBLIC SECTOR EMPLOYMENT, 2007-10

	2007	2008	2009	2010
Total number of public employees	111,229	108,857	115,086	117,199
Share of public employees in employment (%)	19.1	18.1	18.5	18.4

Source: Ministry of Finance, data based on SSO LFS.

TABLE 3.7 SHARE OF EMPLOYMENT BY ECONOMIC SECTOR, 2007-10 (%)

	2007	2008	2009	2010
Agriculture	18.3	19.7	18.5	19.0
Industry, incl. construction	31.3	31.3	29.7	29.0
Services	50.4	49.1	51.7	52.0

Source: SSO LFS data, authors' calculation.

TABLE 3.8 EMPLOYMENT BY LABOUR STATUS AND GENDER, 2007-10 (%)

	2007		2008		2009		2010*	
	Total	Female	Total	Female	Total	Female	Total	Female
Total	590,230	39.2	609,020	38.7	629,901	38.2	637,855	38.5
Employee	72.3	30.1	71.8	29.0	71.9	29.2	71.5	n.a.
Employer	5.5	1.3	4.9	1.2	5.2	1.2	5.4	n.a.
Self-employed	12.0	1.9	12.9	2.1	12.7	1.7	13.1	n.a.
Unpaid family worker	10.1	5.8	10.3	6.4	10.2	6.1	10.0	n.a.

(*) 15-64; (n.a.) Not available.

Source: SSO LFS, authors' calculation.

TABLE 3.9 REGISTRATION FORMS SUBMITTED TO THE ESA FOR INDEFINITE AND TEMPORARY WORK, 2008-11

	2011 (1 Jan-31 May)		2010 (1 Jan-31 Dec)		2009 (1 Jan-31 Dec)		2008 (1 Jan-31 Dec)	
	Number	%	Number	%	Number	%	Number	%
Total	95,110	100.0	232,499	100.0	245,314	100.0	210,010	100.0
Employment for indefinite period	35,789	37.6	87,872	37.8	101,292	41.3	89,039	42.4
Temporary and seasonal employment	59,321	62.4	144,627	62.2	144,022	58.7	120,971	57.6

Source: ESA records.

TABLE 3.10 UNEMPLOYMENT BY GENDER, AGE GROUP AND DURATION (1,000), 2006-09

	2006			2007			2008			2009		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
15-24 age group												
Total	69.6	41.3	28.3	67.6	42.2	25.4	65.7	40.2	25.4	62.3	37.9	24.4
1-2 months	4.8	3.1	1.8	4.8	2.8	2.0	5.5	2.8	2.6	5.8	3.1	2.8
3-5 months	5.9	3.2	2.7	6.6	3.9	2.7	6.5	3.9	2.6	6.1	3.4	2.7
6-11 months	8.4	5.0	3.4	9.2	6.0	3.2	7.7	4.1	3.5	8.2	5.1	3.1
12-17 months	7.3	4.2	3.0	8.4	5.4	3.0	8.0	5.6	2.4	7.7	4.4	3.2
18-23 months	5.2	3.1	2.1	6.5	3.7	2.8	5.7	4.1	1.6	5.1	2.9	2.2
24-47 months	19.6	12.0	7.7	17.3	10.8	6.5	18.7	12.1	6.6	16.1	11.0	5.1
48 months or over	17.0	10.1	6.9	14.0	9.1	4.9	12.3	6.9	5.4	12.0	7.2	4.8
15-74 age group												
Total	321.2	191.8	129.4	316.9	189.3	127.6	310.4	188.2	122.2	298.9	181.4	117.5
Less than 1 month	2.2	1.2		2.2	1.2		3.8	2.0	1.9	3.4	2.0	1.4
1-2 months	13.4	8.6	4.8	10.9	6.4	4.5	13.0	7.3	5.7	17.5	10.0	7.6
3-5 months	15.4	8.8	6.6	14.0	8.5	5.5	13.8	8.1	5.7	13.7	8.1	5.6
6-11 months	20.3	12.6	7.8	21.0	13.0	8.0	16.3	9.1	7.2	20.3	12.2	8.2
12-17 months	17.9	10.8	7.0	17.8	10.7	7.2	16.4	9.8	6.7	17.3	9.9	7.5
18-23 months	12.6	7.7	4.9	14.5	8.2	6.4	13.0	8.2	4.8	12.2	6.6	5.6
24-47 months	58.5	37.4	21.0	50.4	30.6	19.9	47.3	29.5	17.8	41.7	25.2	16.6
48 months or over	180.0	104.4	75.5	186.0	110.8	75.2	186.8	114.3	72.4	172.6	107.6	65.0

Source: Eurostat LFS data.

TABLE 3.11 REGISTERED UNEMPLOYED BY DURATION OF UNEMPLOYMENT AND GENDER, 2008-11

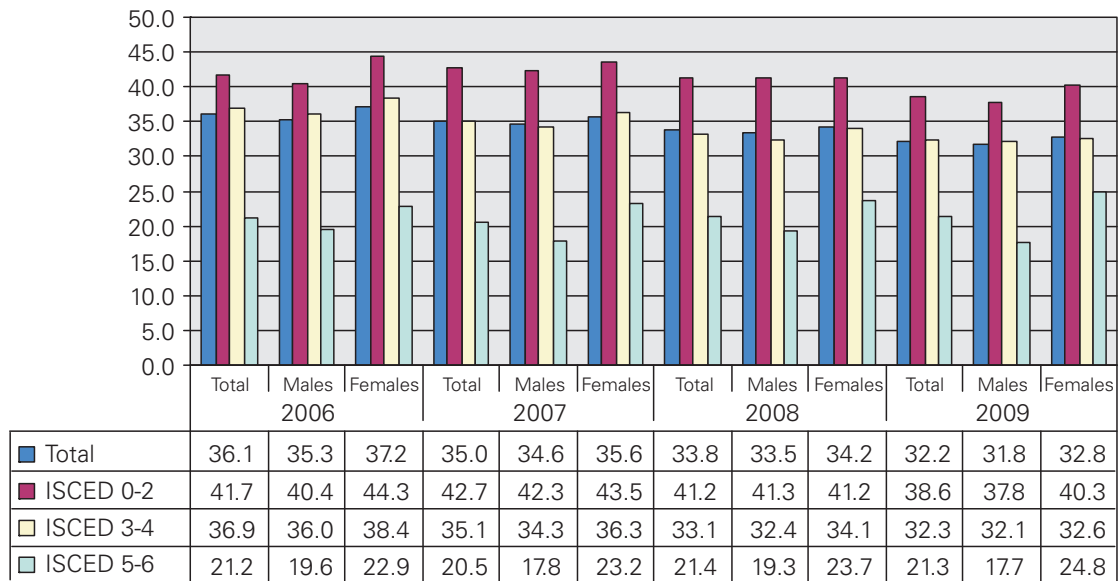
	31 May 2011		31 Dec 2010		31 Dec 2009		31 Dec 2008	
	Number	%	Number	%	Number	%	Number	%
Total								
Total	315,472	100.0	321,341	100.0	341,295	100.0	343,363	100.0
Less than 1 month	5,679	1.8	7,238	2.3	8,906	2.6	7,564	2.2
1-5 months	31,888	10.1	30,185	9.4	29,145	8.5	27,839	8.1
6-11 months	26,272	8.3	23,766	7.4	31,164	9.1	25,962	7.6
12-17 months	21,074	6.7	25,673	8.0	26,358	7.7	23,969	7.0
18-23 months	20,405	6.5	20,361	6.3	17,269	5.1	19,852	5.8
2 years	31,704	10.0	29,924	9.3	31,842	9.3	38,905	11.3
3 years	21,517	6.8	23,736	7.4	29,633	8.7	21,914	6.4
4 years	21,649	6.9	21,990	6.8	17,325	5.1	22,248	6.5
5-7 years	40,704	12.9	41,979	13.1	48,225	14.1	49,414	14.4
8 or more years	94,580	30.0	96,489	30.0	101,428	29.7	105,696	30.8
Male								
Total	181,514	100.0	184,959	100.0	195,326	100.0	198,480	100.0
Less than 1 month	3,137	1.7	4,208	2.3	5,155	2.6	4,191	2.1
1-5 months	17,955	9.9	16,582	9.0	16,085	8.2	14,739	7.4
6-11 months	14,508	8.0	13,483	7.3	17,151	8.8	14,135	7.1
12-17 months	12,104	6.7	14,560	7.9	14,160	7.2	13,220	6.7
18-23 months	11,545	6.4	11,007	6.0	9,379	4.8	11,013	5.5
2 years	16,920	9.3	16,177	8.7	17,391	8.9	22,274	11.2
3 years	11,749	6.5	12,996	7.0	16,713	8.6	12,062	6.1
4 years	12,073	6.7	12,580	6.8	9,454	4.8	13,132	6.6
5-7 years	23,851	13.1	24,804	13.4	28,720	14.7	29,248	14.7
8 or more years	57,672	31.8	58,562	31.7	61,118	31.3	64,466	32.5
Female								
Total	133,958	100.0	136,382	100.0	145,969	100.0	144,883	100.0
Less than 1 month	2,542	1.9	3,030	2.2	3,751	2.6	3,373	2.3
1-5 months	13,933	10.4	13,603	10.0	13,060	8.9	13,100	9.0
6-11 months	11,764	8.8	10,283	7.5	14,013	9.6	11,827	8.2
12-17 months	8,970	6.7	11,113	8.1	12,198	8.4	10,749	7.4
18-23 months	8,860	6.6	9,354	6.9	7,890	5.4	8,839	6.1
2 years	14,784	11.0	13,747	10.1	14,451	9.9	16,631	11.5
3 years	9,768	7.3	10,740	7.9	12,920	8.9	9,852	6.8
4 years	9,576	7.1	9,410	6.9	7,871	5.4	9,116	6.3
5-7 years	16,853	12.6	17,175	12.6	19,505	13.4	20,166	13.9
8 or more years	36,908	27.6	37,927	27.8	40,310	27.6	41,230	28.5

Source: ESA records.

TABLE 3.12 REGISTERED UNEMPLOYED BY EDUCATION LEVEL AND GENDER, 2008-11

	31 May 2011		31 Dec 2010		31 Dec 2009		31 Dec 2008	
	Number	%	Number	%	Number	%	Number	%
Total								
Total	315,472	100.0	321,341	100.0	341,295	100.0	343,363	100.0
With no or low-level qualification	164,641	52.2	168,248	52.4	179,683	52.6	181,254	52.8
With qualification or high-level qualification	48,183	15.3	49,718	15.5	53,541	15.7	55,328	16.1
Secondary vocational education	76,677	24.3	77,748	24.2	81,904	24.0	82,369	24.0
Higher vocational education	4,761	1.5	4,889	1.5	5,314	1.6	5,671	1.7
University vocational education	21,210	6.7	20,738	6.5	20,853	6.1	18,741	5.5
Male								
Total	181,514	100.0	184,959	100.0	195,356	100.0	198,480	100.0
With no or low-level qualification	98,762	54.4	100,861	54.5	106,037	54.3	108,365	54.6
With qualification or high-level qualification	32,521	17.9	33,539	18.1	36,141	18.5	37,560	18.9
Secondary vocational education	39,502	21.8	39,991	21.6	42,124	21.6	42,216	21.3
Higher vocational education	2,489	1.4	2,560	1.4	2,836	1.5	3,045	1.5
University vocational education	8,240	4.5	8,008	4.3	8,218	4.2	7,294	3.7
Female								
Total	133,958	100.0	136,382	100.0	145,939	100.0	144,883	100.0
With no or low-level qualification	65,879	49.2	67,387	49.4	73,646	50.5	72,889	50.3
With qualification or high-level qualification	15,662	11.7	16,179	11.9	17,400	11.9	17,768	12.3
Secondary vocational education	37,175	27.8	37,757	27.7	39,780	27.3	40,153	27.7
Higher vocational education	2,272	1.7	2,329	1.7	2,478	1.7	2,626	1.8
University vocational education	12,970	9.7	12,730	9.3	12,635	8.7	11,447	7.9

Source: ESA records.

FIGURE 3.2 UNEMPLOYMENT RATES (15-64) BY EDUCATION LEVEL AND GENDER (%)

Source: Eurostat LFS data, ETF's graph.

TABLE 3.13 FEMALE LABOUR MARKET TRENDS (15-64), 2008-10

	2008	2009	2010
Non-institutional female population	708,280	710,540	714,565
Female labour force	355,220	355,378	360,183
Female employed	233,210	238,317	244,862
Female unemployed	122,010	117,061	116,950
Female inactive	353,060	355,164	354,382

Source: SSO LFS.

TABLE 3.14 FEMALE LABOUR FORCE (15-64), 2008-10 (%)

	2008	2009	2010
Female activity rate	50.2	50.0	50.4
Female employment	32.9	33.5	34.0
Female unemployment	34.3	32.9	32.5

Source: SSO LFS, authors' calculation.

TABLE 3.15 YOUTH LABOUR MARKET TRENDS (15-24), 2007-10

	2007	2008	2009	2010
Non-institutional youth population	326,323	324,357	322,467	319,254
Youth labour force	117,048	116,490	112,995	106,432
Youth employed	49,491	50,828	50,739	49,320
Youth unemployed	67,556	65,662	62,256	57,130
Youth inactive	209,325	207,867	209,467	212,822

Source: SSO LFS.

TABLE 3.16 YOUTH LABOUR FORCE (15-24), 2007-10 (%)

	2007	2008	2009	2010
Youth activity rate	35.9	36.1	35.0	33.3
Youth employment	15.1	15.6	15.7	15.4
Youth unemployment	57.7	56.3	55.1	53.7

Source: SSO LFS, authors' calculation.

TABLE 3.17 ALMP – BUDGET, SHARE OF GDP, PARTICIPANTS AND COVERAGE, 2008-11

	2008	2009	2010	2011*
Budget (MKD million)	681	1.185	887	608
% of GDP	0.07	0.20	0.13	0.11
Total participation of registered unemployed	8,565	14,162	8,947	8,065
Coverage of total registered unemployed (%)	2.0	1.9	2.1	

(*) Estimated GDP for 2011.

Source: Ministry of Labour and Social Policy.

TABLE 3.18 ALMP – TOTAL BUDGET*, 2007-10

	MKD	EUR
2007	297,600,000	4,819,433
2008	294,191,921	4,764,242
2009	825,102,860	13,361,990
2010	526,843,350	8,531,876

(*) Including donor contributions.

Source: Operational Plan for Active Employment Programmes and Measures for the respective year.

TABLE 3.19 ESA BUDGET, 2007-10

	ESA budget (MKD)	ALMPs as % of ESA budget	Staff wages as % of ESA budget
2007	5,183,600,000	4.02	3.26
2008	5,006,383,000	8.66	3.83
2009	4,587,599,000	19.48	3.76
2010	2,894,338,000	16.41	5.81

Source: ESA.

4. KEY POLICY ISSUES, STRATEGIES AND CHALLENGES IN SOCIAL INCLUSION

4.1 POLICY INITIATIVES AND PROGRAMMES FOR VULNERABLE GROUPS

Development of a social inclusion policy

The social inclusion concept appeared on the political agenda in the country in 2001. The National Strategy for Poverty Reduction of 2002 stated that most of those affected by social exclusion fell into four categories: households of a lower economic standard and those that have children under the age of seven; households where the head of household has no education; young people; and people living in rural areas. As this Strategy was given no systematic follow-up, mainly as a result of the ongoing ethnic tensions of the time, the social inclusion concept was not translated into policy and actions until 2004.

What followed was a brief policy document entitled Programme for Social Inclusion (2004), in which four categories of socially excluded populations were identified: drug users and their families; street children/children living on the streets and their parents; victims of family violence; and homeless people. These categories were identified on the basis of their higher vulnerability and the lack of organised social welfare tailored to their needs.

The publication of the document was followed by a number of measures for vulnerable groups, such as the opening of: two day-care centres for street children in Skopje; two day centres for drug addicts in Kumanovo and Ohrid; six day centres for victims of family violence in Kocani, Kumanovo, Bitola, Ohrid, Strumica and Skopje; and one centre for homeless people in Skopje.

Since 2004, the social inclusion policy has received greater political attention, accompanied by a number of new legislative measures and operational plans and programmes such as: the National Strategy on alleviation of poverty and social exclusion; the National Strategy for protection from family violence; the Multidisciplinary Protocol for dealing with street children; and the Conditional Cash Transfer programme.

The latest National Strategy on the alleviation of poverty and social exclusion (2010) identifies a broader framework of socially excluded groups, including: long-term unemployed people; employed individuals with extremely

low incomes; people living in rural poverty; women belonging to ethnic communities resident in rural areas; the urban poor; children from families of three or more children, particularly those with unemployed parents; and children living in shelter institutions.

In addition, the Strategy also identifies populations in particular domains of social exclusion, such as:

- transport – the poor, people with special needs and people living in remote regions;
- housing – the homeless, refugees and internally displaced people, children deprived of parental care, victims of family violence, nomads and the Roma ethnic community;
- information society – individuals on low incomes, old people, the rural population with inadequate access to the communications infrastructure and people with low levels of education.

Other, newer social protection programmes designed to support the most vulnerable categories include: energy subsidies of MKD 600 (EUR 10, 2012) per month for those on social benefits⁴¹; a broadened network of public kitchens, jointly financed by central and local governments; the issuing of free health coupons for all to incorporate around 35,000 citizens with no health insurance on the basis of proven citizenship and monthly earnings of less than MKD 11,000 (EUR 180, 2012); social housing for children with no parents or no longer in the care of their parents, in foster homes or in residential care.

In addition, the institutional setting for administration of the social inclusion policy was strengthened through the development of a separate Social Inclusion Unit within the Ministry of Labour and Social Policy, responsible for advocating and streamlining the social inclusion concept within public policies and programmes.

The promotion of this concept in national legislation and administration was also assisted by international governmental organisations, most prominently: the EU, the UNDP and UNICEF. Their technical expertise and financial support contributed to a number of initiatives including: the creation of the National Strategy on the alleviation of poverty and social exclusion and the consecutive operational plans; the development of small-scale projects related to the promotion of employment among socially excluded groups; and increased educational support for excluded children.

41 In March 2011, 17,343 households were entitled to the electricity subsidy.

The EU was also very influential in encouraging greater inclusion of NGOs and local municipalities in discussions and preparations for the social inclusion strategy and its operational plans. Other international NGOs such as the Open Society Institute and the Friedrich Ebert Foundation also exerted influence through research studies and concrete projects related to excluded groups.

Overall, it can be said that the initial focus of the social inclusion policy has widened and that the risk of exclusion is now associated with a broader range of elements including: low educational level, lack of employment, size of household, ethnicity, region and age. The identification of vulnerable groups is made on the basis of all available official statistics on poverty and unemployment as well as data and information provided by ministries and relevant public agencies such as the Ministry of Labour and Social Policy, the Employment Agency and social work centres.

However, assessment of vulnerability and exclusion and appropriate approaches to the issues in policy documents and programmes still represent a great challenge given the lack of in-depth studies or evaluations of the position of service beneficiaries or vulnerable groups, their use of the social protection system and what they require from this. In addition, official statistics provide no disaggregated data on poverty and social exclusion. For example, the EU 2020 data available are only given as percentages of overall population, without any disaggregation based on ethnicity, gender, region or any other basis.

As a result, the social inclusion policy of the former Yugoslav Republic of Macedonia appears to be created on an ad-hoc basis, rather than any systematic and comprehensive assessment. Harmonised and timely social statistics in combination with independent evaluations of the accessibility and use of social protection programmes are needed as mechanisms for assessment of vulnerable and socially excluded groups in order to guarantee their inclusion in policy programmes and priorities.

Discrimination and social inclusion policy

Effective social inclusion policy in the country is also dependent on various issues beyond the realms of legislation, institutional structure and financial resources, as discrimination presents greater problems in the wider social sphere.

While the Constitution and other generic and sector Laws guarantee the right of equal access to social services and forbid discrimination in every form, the issue is still a concern. Discrimination occurs in many forms, most prevalently on the basis of: ethnicity, gender, drug addiction, sexual orientation and homelessness.

Some vulnerable ethnic groups are subjected to more discrimination than others, and the Roma are particularly active in appealing for the elimination of negative stereotypes and prejudices, and discrimination against them in employment, education and housing, especially

through their NGOs. According to a Roma Decade Watch document (2010), Roma integration has not yet been achieved in the country and discrimination against the Roma continues to exist.

The document states that much work remains to be done in fighting discrimination against the Roma and in reintegrating Roma students into mainstream education from special schools, along with active campaigning against the segregation of Roma in general. It also notes that no positive changes or signs of progress have been observed in integration and the elimination of discrimination in the field of housing in particular.

Consideration must be made of the delicate relationship between ethnic Macedonians and ethnic Albanians in any assessment of the overall situation of discrimination in the country, as the situation of other vulnerable minorities is to some extent dependent on the fragile equilibrium between the larger two groups. Very often political efforts and initiatives to improve the status of less represented ethnic groups in all public spheres lead to policies of equal representation being put in place and activated.

Lack of tolerance and the lack of reconciliation between different ethnic groups are also problematic issues for the social inclusion policy. Previous research (UNDP, 2008) shows that ethnic Macedonians are rarely prepared to cooperate economically with ethnic Albanians and 69% of ethnic Macedonians state that they would not allow their children to attend schools where there was a majority from another ethnic origin, compared with a figure of 42% among Albanians and 32% among other ethnic groups (UNDP, 2008, pp. 60-61).

Inherited ethnic stereotypes, as well as historical, political, structural and economic factors, all work against positive inter-ethnic relations and the establishment of more profound and mutually acceptable political and social participation between all ethnic groups.

In addition, some of the other more general problems associated with unequal access to labour and social welfare rights among less represented ethnic groups could possibly be attributed to causes such as: the concentration of the bulk of employment capacities in bigger cities where minorities are less settled (with the exception of the Roma in Skopje); investment and employment on the basis of ethnic preferences; and a lack of training and re-training adapted to the language and other needs of particular ethnic groups.

According to anecdotal evidence, there is also clear discrimination against drug users and the gay and lesbian community, especially when individuals from these groups try to access formal mechanisms of social protection such as shelters, day care centres and primary health facilities.

Although these problems are not well documented, stigmatisation is known to occur and negative stereotypes are applied to people in these groups possibly as a product of the fear that these individuals may have a negative influence on other service users.

These issues are identified as the main problems barring regular access to the social protection system for these minority groups.

Trends in social exclusion and vulnerable groups

The increasingly solid legislative base and administrative bodies for social inclusion policies and programmes have not yet managed to achieve much improvement in the actual problems of poverty and social exclusion in the country.

Current official data indicate that the poverty rate (measured as 70% of median equivalent expenditure) stood at 30.9% in 2010. When measured at 60% of median income in 2009 (UNDP, 2010), the poverty rate came out at a lower, but nonetheless still high, 27.5%.

EU 2020 indicators for poverty offer the two additional indicators of material deprivation and jobless households. According to official statistics, the rate of material deprivation in 2009 was 41%, and the actual rate was probably higher, as this indicator does not measure the element of people unable to afford unforeseen expenses.

According to LFS data from 2009, the rate of jobless households (calculated as the share of persons living in households where nobody works) is 19.2% among those aged 0 to 17 years, while it is 16.1% among those aged 18 to 59 years.

When analysed by group profile, the official statistics identify the most vulnerable groups in the country as 'multi-member households' (47.3% of the poor live in households with five or more members); the 'unemployed' (44.8% of all poor people are unemployed); and 'less educated people' (54.7% of the poor live in households where the head of household has no education, or primary education at most).

By household type, the most vulnerable groups were: 'other households with children' – a category that includes unmarried couples with children, single parent families, and other non-traditional arrangements – with a poverty rate of 39.2%. Poverty is also clearly evident in rural areas, as 47.1% of the poor live in more remote locations.

The official data are confirmed by newer studies on social exclusion, where some additional groups have been identified as vulnerable categories at risk of exclusion. These include: beneficiaries of permanent social assistance; representatives of the Turkish ethnic community; population living in mountainous areas (Ludwig Boltzmann Institute, 2011, p. 230); and children living with unemployed parents, particularly Roma and Albanian children (MPPS, 2011).

4.2 SOCIAL INCLUSION IN EDUCATION

Access to education and educational attainment are crucial elements for the analysis of social exclusion. In this respect, current official data in the country imply that there are significant numbers of children not attending pre-school, primary and secondary education, although the latter two are compulsory. Analysis of SSO data on pre-school education implies that only 15.7%⁴² of children aged 0-6 were enrolled in kindergartens in 2010.

While cultural and traditional factors support low pre-school coverage, the limited number of pre-school facilities also contributes to the low trend of pre-school enrolment with a national total of only 54 pre-school institutions in 2010 and 723 children turned away once all the available places were filled. A closer look at the ethnicity of the pre-school children enrolled in 2010 showed only 6.34% were ethnic Albanian, 1.31% were Roma and 0.95% were Turk, flagging up a problem of low attendance for children from less well-represented ethnic groups in the country.

In the 2009/10 school year, only 94.2% of children aged 6 to 14 years were attending primary and lower secondary school, despite the fact that schooling for this age group is compulsory. According to the National Strategy for the Alleviation of Poverty and Social Exclusion (2010, p. 21), most of the children not in primary education come from socially vulnerable families, the Roma ethnic community, or remote rural settlements.

A recent study into the reasons for educational exclusion among Roma children in primary schools by Donevska et al. (2010, p. 49) outlines the main contributory factors as being: the low socio-economic position of Roma families; high rates of unemployment among Roma adults that encourage Roma children to work; early marriage; and low educational attainment among Roma parents that gives them a negative attitude towards education. This report also states that the interplay of mutually reinforcing influences around a triangle formed by the three elements of 'society', 'Roma subculture' and 'Roma families' shape the determinants of this complex problem (ibid., p. 7).

Another serious issue relating to education is the segregation of Roma children in schools for children with special needs. The trend toward greater inclusion in mainstream schooling for children with special needs has not decreased the number of Roma students attending 'special schools' where they constitute the majority of students. Many of the Roma children are placed in these schools because of language or cultural barriers rather than any issue with their intellectual abilities. In addition, the additional benefits provided to children attending special schools may also have encouraged greater numbers of Roma families to place their children in these schools.

⁴² Data calculated according to the number of enrolled children from age 0 to 5 years in 2010 divided by the total number of children in the population from 0 to 5 years, multiplied by 100.

Petroska-Beska et al. (Roma Education Fund, 2007) support the argument that Roma children are disproportionately represented in schools and classes for children with learning disabilities, citing unofficial school data that shows almost 30% of students in special primary schools, special classrooms within regular schools, and institutes for education and rehabilitation are of Roma ethnicity. The proportion of Roma in special schooling goes far beyond the percentage of Roma in the overall population of the country, a situation that indicates a serious bias in enrolment procedures and the distribution of social benefits and aid to families (*ibid.*, p. 28).

Students in all primary and secondary schools are provided with free text books, but according to Irena Milanovska⁴³, the social worker at the special primary school Zlatan Sremac, students at this school receive additional benefits in the form of free breakfast, free text books (although these books are not adapted to the disability-related needs of the children), free bus tickets and some additional school supplies for certain projects. An additional financial benefit is offered to families on social assistance. In the 2010/11 school year, 28.5% of the students in this school were Roma.

Trends in secondary enrolment further illustrate the problem of educational exclusion as only 79.8% of children aged 15 to 18 years were attending secondary schools in 2010, despite these years of schooling being obligatory (SSO, 2011). No comprehensive analysis has been made of the reasons for exclusion from secondary education in the country, but some suggested contributory factors are: the distance to secondary educational facilities; the lack of secondary educational facilities in rural and mountainous locations; costs related to study and travelling; and the low economic position of households leading to early, often informal or precarious engagement in work among young people.

A government's study of exclusion from secondary education in 2009 showed low educational attainment among young people of minority ethnic communities in the country, including Albanians, Turks and Roma, where the proportions of secondary school completion are not yet on a par with their proportion of the total population.

A 2010 UNICEF study into how children and young people cope in difficult economic times shows most of the young people excluded from the education system are either of Roma origin, live in single-parent families or in households with five or more members, and come from households where the parents have incomplete secondary or primary education (Gerovska Mitev, 2010, p. 43). The reasons for this lie partly in the educational backgrounds of these households, but also in the shortage of targeted educational policies for these families and the lack of investment in education in their places of residence.

Children with special educational needs have been pinpointed by a government strategy advocating inclusion in mainstream education. However, no complementary

efforts have been made to improve conditions in schools for children with special needs, where there is a lack of specialised text books and study materials adapted to the educational needs of these children. In the 2009/10 school year 1,075 children were in special primary schools and 305 in special secondary education. There is no official estimate of the total number of children with special educational needs.

A significant number of government policies and programmes have been aimed at improving educational inclusion at all levels, targeting more vulnerable groups in particular. The majority of these focused on increasing Roma inclusion, mainly at pre-school level but also at university.

According to a representative of the Ministry of Labour and Social Policy⁴⁴, the number of Roma children in kindergartens has increased from 1.5% to 4% under a project for the greater inclusion of Roma children in pre-school facilities supported by the ministry and UNICEF.

In addition, the government has adopted a Conditional Cash Transfer⁴⁵ programme that provides additional financial benefits to the children of parents receiving social assistance conditional to regular school attendance in secondary education.

However, the amount on offer may be insufficient incentive for secondary school attendance in the socially vulnerable population as the grant totals only MKD 1,000 (EUR 16) per month throughout the year. Other factors, such as: the costs of travelling, food and clothing; the lack of birth certificate and other required documentation; and other ethnicity-specific issues for some vulnerable groups, can combine to further complicate the scenario.

Many of the constituent programmes of the Roma Decade also focused on the prevention of early school dropout and increasing educational attainment among vulnerable Roma students.

There are also several generic educational support programmes, such as higher education scholarships for at-risk students (i.e. those living in low income families, children with no parents, children of single parents, children of redundant workers) and secondary education scholarships for the same groups plus those whose parents are recipients of social assistance.

The government support programmes are complemented by a number of support mechanisms in the form of cash benefits, school supplies and other benefits in kind distributed to children in the more vulnerable categories by civil society organisations.

The State Education Inspectorate has developed school performance quality indicators (MoES-SEI, 2010, Chapter 2) to help assess school actions to tackle critical issues such as: children with special educational needs;

⁴³ Gerovska, personal communication, 26 August 2011.

⁴⁴ See <http://vesti.alfa.mk/default.aspx?eventid=10051&mid=36>

⁴⁵ Some 9,560 students applied for this in the 2010/11 school year.

dropout levels; and a breakdown of student achievement by ethnicity and gender. This system of indicators is common across all schools, meaning that the evidence gathered at school level across the country will go on to form a reliable source of data for analysis, the identification of good and bad practices and policy making at the municipal and national levels.

Apart from the official statistics and periodic evaluations, however, no systematic monitoring and evaluation is in place to assess the effectiveness of government policies for social inclusion in education.

4.3 SOCIAL INCLUSION IN EMPLOYMENT

Lack of access to the labour market in the former Yugoslav Republic of Macedonia is mostly experienced by: those with lower educational attainment (primary and secondary education); people of Roma ethnicity; young people aged 15-24 years; the long-term unemployed (five years and more); and women from the minority ethnic groups of Albanians, Turks and Roma. Disabled people are also confronted with many barriers to inclusion on the labour market.

The main reasons for exclusion from formal employment are associated with jobless economic growth, a lack of targeted employment opportunities and a lack of educational qualifications combined with traditional behavioural norms and customs, especially for women. The impact of the informal economy is also a significant consideration, as many of those registered as unemployed may actually be involved in undeclared work.

ESA data on registered unemployment for August 2011 state that 51.2% of the unemployed in the country had no primary or incomplete primary education. LFS data on the educational attainment of the workforce for the first quarter of 2011, however, give a lower but still significant figure of 35%.

Lack of education is also a significant factor in poverty, where those without primary education, with incomplete primary or complete primary education represented 54.8% of all the poor in the country in 2010. Despite the obvious obstacle to inclusion in the labour market constituted by the lack of appropriate skills, their situation is aggravated by the fact that ALMPs mainly target those with at least minimal vocational skills.

The Roma also lack access to the formal job market in the former Yugoslav Republic of Macedonia due to a combination of factors, such as low educational attainment, high participation in undeclared work and patriarchal norms and values that prohibit most Roma from involvement in the labour market. UNDP research from 2010 indicates unemployment rates of 75% among the Roma (UNDP, 2010, p. 48).

Employment Agency data from September 2011 state that the Roma constitute 4.8% of all registered

unemployed. However, not all unemployed Roma are in position to register with the Agency due to their lack of documents or understanding of the system, amongst other factors. Comparisons between the numbers of registered unemployed and official numbers for ethnic communities in the country imply that the Roma actually have the largest share of registered unemployment at 27.5%. Also, many Roma work in precarious and undeclared jobs such as selling goods at unregulated local retail markets known as 'green' markets, house cleaning, collecting plastic for recycling and manual work, or in jobs where no social contributions are made, all of which add up to low standards of living.

Unemployment among people aged 15-24 stood at 54.6% in the second quarter of 2011. Even though many of the young people in this category are in education and may not be actively looking for jobs, this rate is still comparatively higher than for equivalent populations in the EU-27, Croatia or Bulgaria, at 21.1%, 32.6% and 23.2% respectively (Eurostat, 2010). Young ethnic Roma, Albanians and Turks and those living in remote rural locations are particularly harshly affected by this problem, as educational attainment is lower for these groups, meaning they are less likely to be in formal education until the age of 24.

Access to the labour market for young people may be hindered by their lack of education or lack of mobility, but also by the requirements for work experience cited in job advertisements, insufficient opportunities for volunteering and internships in both the public and private sectors, and the lack of specialized career guidance services to advise them on the skills required on the labour market.

Serious problems of social exclusion face the long-term unemployed once their period of unemployment extends beyond four-year mark, as the long period of inactivity negatively impacts on their skills, motivation and labour market perspectives, eventually discouraging them from actively seeking employment.

Data from the 2010 LFS stated that 63% of all the unemployed have been waiting for at least four years for a job (as was discussed in Chapter 3) and data from the Employment Agency released in September 2011 confirmed this negative trend, giving a figure of 49% of all registered unemployed waiting four or more years for a job due to a lack of required vocational skills, gaps in an employment history or a lack of competitiveness.

Roma, Albanian and Turkish women, in particular, tend to have lower participation rates on the labour market, but the LFS provides no data on activity or employment trends in relation to ethnicity and the latest available official data on the issue comes from the 2002 census.

Data from this census cites particularly low employment rates for Albanian, Roma and Turkish women at 2.9%, 5.5% and 5.8% respectively. It is probable that a significant share of women from these ethnicities are active as unpaid family workers in agriculture. The same source (*ibid*) shows these categories of women have higher rates of unemployment than other women at

84.1% for Roma women, 72.9% for Albanian women and 69.7% for Turkish women. A UNDP analysis from 2010 shows that 41.8% of the ethnic Albanian population does not work due to household responsibilities, and most of the non-working contingent are women. In addition, the World Bank poverty assessment of 2009 indicates that low-skilled women from Muslim communities feel less comfortable in formal employment outside their home and community, as do the other members of their families.

Another study on low skilled women from minority groups by Angel-Urdinola (2008) reveals estimates that only 11% of women of Albanian origin are economically active, making them 35% less likely to be employed than women of Macedonian origin. According to the focus group analysis among women from less represented ethnic groups (CRPM, 2008), the main discouraging factors for their inclusion in the labour market were: family responsibilities, precarious job conditions, age, skill level and marital status.

Finally, people experiencing any form of disability are in the more vulnerable groups on the labour market, given the lower rate of competitiveness of the disabled in a country with scarce employment growth and a lack of employment opportunities. Effective approaches to the labour market problems of disabled people are aggravated by the lack of official data on total numbers. ESA data on the number of registered unemployed stating a disability gave a total of 2,326, with developmental disabilities forming the largest category at 858 individuals. Those registered disabled and unemployed came from the full range of age groups and 1,182 recorded having no education.

Data from a 2009 UNIFEM study on the position of disabled persons on the labour market reveals a low level of employment for capable physically disabled persons at 30.3%, and went on to stress that employment is less likely among disabled people in minority ethnic groups within the country and those living in rural areas. The study also identified some of the obstacles faced by physically disabled persons in their search for jobs, such as: distrust regarding their abilities from employers, the nature of their disability and the inadequacy of their education, and age (older disabled people are less likely to be offered a job).

A study on people with disabilities in the country from 2008 (Trajkovski, 2008, p. 40) identified the major barriers to the labour market for this group as: various administrative and bureaucratic obstacles including language, problems with communication and understanding; excessive documentation; problems with physical access; a lack of public transport; uncooperative staff; insufficient time and patience among employers; requests for bribes and corruption; discrimination in relation to their disability; discrimination related to their poor financial condition; and discrimination on ethnic grounds.

There are several laws, strategies and ensuing action plans that aim to stimulate access to employment for some of the vulnerable groups mentioned above, including: the Law on the employment of disabled persons, 2000; the Law for the prevention of and protection from discrimination, 2010; the Law for equal opportunities among men and women, 2008; the National Strategy for the equalisation of rights for persons with disabilities, 2010-18; the Action Plan for accessibility to public institutions for persons with disabilities, 2009; the Strategy for Roma in Macedonia, 2005. These have been complemented by some newer policy documents promoting access to employment for vulnerable categories, including: the National Strategy for Employment 2015 and the Action Plan for Employment 2011-13, which aim to provide employment promotion subsidies and training for the Roma, female victims of family violence and unemployed disabled people.

The National Strategy for Employment 2015 (p. 42) establishes that there are still major challenges to employment for more vulnerable groups on the basis of several factors, including: the lack of participation in the projects on social inclusion by local municipalities; insufficient number of local public works to employ less employable individuals; and a general lack of social entrepreneurship.

4.4 TERRITORIAL (REGIONAL) COHESION

The former Yugoslav Republic of Macedonia is divided into eight planning regions, for statistical, economic and administrative purposes. According to the EU nomenclature of territorial units for statistics by regional level (NUTS), all of these regions belong to the third level (NUTS 3 – small regions for specific purposes).

Regional disparities in Macedonia have increased in recent years, due to the lack of planned equitable and harmonised economic and social development in the country. In terms of GDP growth, the biggest difference is noticed between the highest levels in Skopski and lowest in the Polog region, with Polog GDP per capita three times lower than Skopski GDP per capita. The lowest activity rate is also seen in the Polog region (at 46.1% in 2008), while the North-east region is notable for negative trends in employment, with an employment rate of 20% in 2009 and an unemployment rate of 64.8% in 2008.

The largest numbers of households receiving social assistance are in Skopski, at 11,320⁴⁶ and Polog, at 11,056, while the South-East region has only 3,159. The urban to rural divide is clearly visible, with figures for 2010 showing the highest rate of poverty standing at 47.1% in 'rural areas,' closely followed by the 'other urban areas' at 43.7%. The poverty rate was lowest in the city of Skopje at 9.2%. This means the Polog region is the most vulnerable in relation to economic growth, labour activity,

46 The Skopski region is the most populated region as it is home to 601,057 of the total 2,052,722 people in the national population.

poverty and social welfare. It is a region mostly populated by ethnic Albanians where there is a high level of undeclared work.

The North-east region is the most vulnerable to unemployment. It is a region of predominantly rural areas with an ethnic mix of 58% Macedonians, 30% Albanians, 6% Serbs and 3% Roma where unemployment is most evident among young people and, to a lesser degree, among people above the age of 50.

The Law on equitable regional development was adopted in 2007 and now serves as the main legislative foundation for measures to counter regional disparities. In addition, in 2009 the government adopted the Strategy for Regional Development for 2009-19 that presented more concrete descriptions of the socio-economic gaps between various regions of the country, pointing out that the Polog region is characterised by the lowest levels of education for people aged 15 years and over, while Skopje has the highest level of education for this group.

The Strategy ends with a list of strategic goals and priorities, listing targets for education, employment and social inclusion that aim to: reduce the number of workers engaged in undeclared work; increase coverage in secondary and higher education; develop and implement lifelong learning programmes; increase the participation rate of women in formal education and lifelong learning programmes; promote public-private partnerships for the employment of young people; improve health care for the

elderly and; provide training to improve quality and flexibility among the workforce in less-developed regions.

In 2008, the previously existing Bureau for Economically Underdeveloped Regions was renamed the Bureau for Regional Development, and it now acts as the main body responsible for drafting strategic and operative planning documents for regional development under the supervision of the Ministry of Local Self-Government.

In 2009, eight centres for development were created, one in each of the eight regions, in order to administer funding and goals for each of the regions at the local level. Some of these regions have been more successful than others in devising projects and attracting funds to implement programmes related to social inclusion.

Some of the social inclusion programmes undertaken in these regions include: Support for employment of women and youth (South-eastern region, financed by the German Society for International Cooperation (GIZ) and co-partnered with the Centre for Development of the Eastern planning region and Centre for Development of the South-Western planning region); Creation of jobs through internships (South-western planning region, with support from the GIZ Programme for Regional Economic Development in the former Yugoslav Republic of Macedonia, the Youth Employability Skills (YES) Network and the Royal Norwegian Embassy); and the institutional infrastructure for the coordination and support of business activities in the Pelagonia region.

STATISTICAL TABLES AND FIGURES

TABLE 4.1 TRENDS IN POVERTY AND MATERIAL DEPRIVATION, 2005-10 (%)

	2005	2006	2007	2008	2009	2010	
At risk of poverty ^a	30.0	29.8	29.4	28.7	31.1	30.9	
Severely materially deprived ^b	55.9	51.0	42.6	41.4	41	n.a.	
Jobless households	0-17 years	30.8	29.4	29.1	23.4	19.2	n.a.
	18-59 years	25.0	24.7	24.2	18.7	16.1	n.a.

Note: (a) Poverty is calculated as the percentage of people with below 70% of median equivalent expenditure; (b) From the Household Budget Survey, based on the number of persons unable to afford four out of eight deprivation items rather than four out of nine, as the category 'cannot face unexpected expenses' is not available; (n.a.) Not available.

Source: SSO 2011 and LFS 2010.

TABLE 4.2 RELATIVE POVERTY* BY HOUSEHOLD SIZE, 2008-10

	2008			2009			2010			
	Number of persons	Headcount index	Poverty gap index	Composition of poor	Headcount index	Poverty gap index	Composition of poor	Headcount index	Poverty gap index	Composition of poor
Total		28.7	9.2	100.0	31.1	10.1	100.0	30.9	10.9	100.0
1		25.3	8.1	1.7	22.8	6.9	1.5	29.4	11.6	2.3
2		21.2	6.7	6.7	24.6	7.6	8.7	24.2	7.7	10.3
3		19.0	5.9	8.3	22.3	6.8	10.4	24.1	7.2	11.3
4		24.4	7.7	25.7	26.1	8.2	25.8	27.6	9.4	28.9
5		33.2	11.2	23.2	36.9	12.0	23.0	34.2	12.1	19.0
6+		37.6	12.0	34.4	42.8	14.9	30.7	42.8	16.7	28.3

(*) Percentage of persons whose expenditures are below the level of 70% of the median equivalent expenditure.
Source: SSO website.

TABLE 4.3 RELATIVE POVERTY* BY ECONOMIC STATUS OF HOUSEHOLD MEMBERS, 2008-10

	2008			2009			2010		
	Headcount index	Poverty gap index	Composition of poor	Headcount index	Poverty gap index	Composition of poor	Headcount index	Poverty gap index	Composition of poor
Total	28.7	9.2	100.0	31.1	10.1	100.0	30.9	10.9	100.0
Unemployed	38.4	13.8	43.0	40.5	13.7	42.7	41.8	16.0	44.8
1 worker	30.6	9.1	35.4	32.5	10.4	33.8	30.5	10.1	32.8
2+ workers	17.9	5.1	21.6	21.0	6.4	23.5	20.6	6.6	22.3

(*) Percentage of persons whose expenditures are below the level of 70% of the median equivalent expenditure.
Source: SSO website.

TABLE 4.4 RELATIVE POVERTY* BY EDUCATIONAL ATTAINMENT OF HOUSEHOLD HEAD, 2008-10

	2008			2009			2010		
	Headcount index	Poverty gap index	Composition of poor	Headcount index	Poverty gap index	Composition of poor	Headcount index	Poverty gap index	Composition of poor
Total	28.7	9.2	100.0	31.1	10.1	100.0	30.9	10.9	100.0
Without education	53.2	19.4	4.3	54.2	22.7	2.7	62.3	30.7	3.0
Incomplete primary	39.1	14.6	15.8	43.4	14.3	14.7	49.6	20.0	14.3
Primary	35.4	11.6	36.5	42.6	14.3	39.3	42.4	14.9	37.5
Secondary	23.4	6.8	36.8	25.7	8.0	38.4	24.6	8.3	38.1
Higher	21.5	5.8	3.2	13.0	3.5	1.7	19.8	5.3	2.7
University	13.8	4.8	3.4	11.7	3.5	3.2	13.6	4.1	4.5

(*) Percentage of persons whose expenditures are below the level of 70% of the median equivalent expenditure.
Source: SSO website.

TABLE 4.5 RELATIVE POVERTY* BY TYPE OF HOUSEHOLD, 2008-10

	2008			2009			2010		
	Headcount index	Poverty gap index	Composition of poor	Headcount index	Poverty gap index	Composition of poor	Headcount index	Poverty gap index	Composition of poor
Total	28.7	9.2	100.0	31.1	10.1	100.0	30.9	10.9	100.0
Elderly households	22.8	7.3	4.9	24.5	8.0	5.7	29.0	10.2	8.2
Couple with children	25.5	9.9	10.2	27.1	9.1	10.3	28.9	10.2	9.6
Other households with children	33.7	10.6	46.7	36.8	12.2	44.0	39.2	14.3	42.9
Households without children	25.8	8.0	38.3	28.5	9.0	40.1	25.8	8.7	39.4

(*) Percentage of persons whose expenditures are below the level of 70% of the median equivalent expenditure.
Source: SSO website.

TABLE 4.6 CHILDREN IN PUBLIC INSTITUTIONS FOR CHILD CARE AND EDUCATION ACCORDING TO ETHNIC AFFILIATION

	Total	Macedo- nians	Albanians	Turks	Roma	Vlachs	Serbs	Bosniaks	Other	Undeclared
Total 2009	22,213	19,945	1,190	187	364	85	220	131	4	87
Total 2010	23,157	20,657	1,469	220	304	100	205	99	2	101
Infant nurseries	3,439	3,137	195	20	26	12	27	10		12
Kindergartens	18,349	16,526	1,010	146	267	87	153	82	2	76
■ Small groups	6,798	6,305	287	52	39	24	43	19	1	28
■ Medium groups	5,136	4,607	317	44	46	26	47	23		26
■ Big groups	6,415	5,614	406	50	182	37	63	40	1	22
Combined groups	1,233	888	246	54	11		14	7		13
Children with intellectual or physical disabilities	52	46	5			1				
Groups for extra-institutional forms of activity	84	60	13				11			
Other groups (food and stay-over)	588	520	64		1	3				

Source: SSO, 2011.

TABLE 4.7 NUMBERS OF PRIMARY SCHOOLS, CLASSES, STUDENTS AND TEACHERS, END OF 2009/10

	Schools	Class sections	Students				Teachers				
			Total	Female	Students who completed the year	% of total	Graduated students Total	Total	Female	Full-time	Female
2008/09	991	10,713	215,078	104,012	213,349	99.1	26,915	16,205	10,359	14,961	9,647
2009/10	990	10,622	208,980	101,150	207,650	99.4	25,730	16,403	10,703	14,983	9,855
Change 2009/10-2008/09	99.9	99.2	97.2	97.2	97.3		95.6	101.2	103.3	100.1	102.2

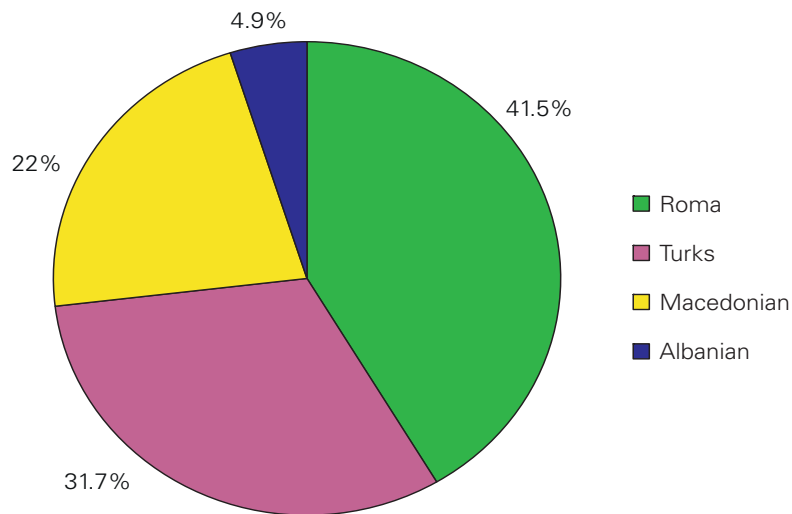
Source: SSO website.

TABLE 4.8 NUMBERS OF UPPER SECONDARY SCHOOLS, CLASSES, STUDENTS AND TEACHERS, END OF 2009/10

	Schools	Class sections	Students					Teachers			
			Total	Female	Students who completed the year	% of total	Graduated students Total	Total	Female	Full-time	Female
2008/09	110	3,295	93,164	44,643	90,855	97.5	24,210	6,832	3,953	5,810	3,342
2009/10	110	3,398	94,284	45,725	92,648	98.3	25,345	7,008	4,041	6,001	3,404
Change 2009/10-2008/09	100.0	103.1	101.2	102.4	102.0		104.7	102.6	102.2	103.3	101.9
Private schools	10	99	1,481	620	1,477	99.7	285	265	152	155	80

Source: SSO website.

FIGURE 4.1 CHILDREN AND YOUNG PEOPLE NOT ATTENDING EDUCATION REGULARLY BY ETHNICITY



Source: Gerovska Mitev, 2010.

TABLE 4.9 CHILDREN IN SPECIAL PRIMARY AND SECONDARY SCHOOLS, 2008-10

	Schools	Class sections	Students				Teachers				
			Total	Female	Students who completed the year	% of total	Graduated students Total	All	Female	Full-time	Female
Special primary and lower secondary schools											
2008/09	45	171	1,054	362	1,030	97.7	122	255	190	240	185
2009/10	44	180	1,075	377	1,028	95.6	120	250	195	230	184
Change 2009/10-2008/09	97.8	105.3	102	104.1	99.8		98.4	98	102.6	95.8	99.5
Special upper secondary schools											
2008/09	4	49	283	83	271	95.8	73	71	35	57	30
2009/10	4	51	305	91	297	97.4	97	70	36	65	34
Change 2009/10-2008/09	100.0	104.1	107.8	109.6	109.6		132.9	98.6	102.8	114	113.3

Source: SSO website.

TABLE 4.10 REGISTERED UNEMPLOYED BY ETHNICITY, 2011

Ethnicity	Number	% of total	% of ethnic group
Macedonian	196,039	65	15.1
Albanian	77,055	25	15.1
Turk	12,825	4.2	16.5
Roma	14,804	4.8	27.5

Source: ESA 2011, authors' calculation.

TABLE 4.11 GDP PER CAPITA BY REGION, 2009 (MKD)

Region	GDP per capita (MKD)
Former Yugoslav Republic of Macedonia	200,293
Vardar region	194,092
East region	170,486
Southwest region	140,262
Southeast region	189,566
Pelagonia region	219,635
Polog region	93,966
Northeast region	104,775
Skopski region	213,040

Source: SSO website.

TABLE 4.12 ACTIVITY, EMPLOYMENT AND UNEMPLOYMENT RATES (15+), 2010 (%)

	Activity rate	Employment rate	Unemployment rate
Former Yugoslav Republic of Macedonia	56.9	38.7	32.0
Vardar region	59.1	37.2	37.0
East region	58.6	49.0	16.4
Southwest region	55.5	36.5	34.3
Southeast region	69.9	61.9	11.5
Pelagonia region	63.8	42.4	33.6
Polog region	46.7	32.3	30.8
Northeast region	58.3	21.7	62.8
Skopski region	54.7	36.7	33.0

Source: SSO website.

TABLE 4.13 BENEFICIARIES OF SOCIAL ASSISTANCE, 2009

	Household head (number of households)	Members of households (incl. household head)
Former Yugoslav Republic of Macedonia	49,515	193,220
Vardar region	3,160	9,779
East region	3,159	12,141
Southwest region	4,253	17,679
Southeast region	3,180	11,278
Pelagonia region	7,281	22,323
Polog region	11,056	40,888
Northeast region	6,106	22,547
Skopski region	11,320	56,585

Source: SSO website.

5. INTERNATIONAL AND BILATERAL DONOR INTERVENTIONS

Education, employment and social inclusion are three areas where there is a high intensity of projects financed by bilateral and multilateral international donors. The project approach predominates in a way that contributes to non-systemic and often non-sustained improvements in approaches and to limited sector-wide change.

5.1 EDUCATION AND TRAINING

A major Education Modernisation project funded by a loan from the **World Bank** completed activities in January 2011, having contributed to important reforms of the education system and to enhanced capacity and quality at school level. The State Matura, external assessment of lower level education, the EMIS system for monitoring performance and teacher training programmes were all developed through this project. Although the implementation was considered satisfactory, the final project report alerted to a likely under-funding of teacher training and aid materials in 2011.

In 2011, under the IPA Component IV Multi-annual Operational Programme for Human Resources Development 2007-13, the **European Commission** launched two twinning projects to support secondary vocational education and adult education systems.

- *Support to the modernisation of the education and training system (MK/07/IB/SO/03)* – The main purpose of this project is to support modernisation of two- and three-year VET. The project will prepare standards for vocational qualifications, reform curricula in accordance with labour market needs and contribute to the training of VET trainers.
- *Support to capacity building of the Centre for Adult Education and development of programmes for adult education and programmes for literacy and fulfilment of elementary education for excluded persons (MK/2007/IB/SO/05)* – This twinning project will support the development of adult education and lifelong learning by strengthening the capacity and functioning of the Centre for Adult Education, while also developing programmes for adult education, literacy and the fulfilment of elementary education for vulnerable persons.

In 2012, the **ETF** is supporting the development of a VET strategy in close collaboration with the VET Centre.

UNICEF contributes to analysis and policy advice on topics of the social inclusion aspects of education, pre-school education and the quality of teaching and curriculum for improved literacy and numeracy.

The **OSCE** has preferred interventions on social inclusion through education, with actions at levels ranging from strategic development, through analysis to teacher training.

USAID implements the following projects in the field of education and training:

- interethnic education;
- Roma education;
- Open the Window – for children with disabilities;
- My Career – to match unemployed young people with available opportunities and encourage the development of internships in the business community;
- YES Network – aiming to increase the employability of young people and to provide support for career guidance in VET schools as one of the main components;
- institutional performance improvement – for the VET Centre on partnership working.

The My Career project is in its third year, matching many out-of-work young people with opportunities, while also educating the business community and education providers in the country on the benefits of internships. There are nine different types of internships under the My Career umbrella including: banking, manufacturing, services, information and communications technology, telecommunication, energy, consulting, trade, and hotel-hospitality. Overall, more than 300 firms, 52 municipalities, and several leading universities have registered with the project, which has provided more than 2,000 internships and 350 jobs for young people in a variety of sectors. Both individuals and companies have benefited from these placements.

The YES Network project collaborates with Employment Service agencies, VET schools and youth-focused NGOs, to help final year students and unemployed young people by providing career coaching and guidance, work readiness skills training and work-based experiences such as internships, practical work and entrepreneurial activities. All are designed to help young people enter into the world of productive work. YES opened 11 career centres in vocational secondary schools in the cities of Tetovo, Bitola, and Strumica, providing equipment, materials and literature worth an average of USD 5,000 per school.

Joint work with the VET Centre in 2009 and 2010 led to the assessment of the Centre's institutional capacity and to the design of a strategy for excellence (VET Centre, 2010). USAID is continuing this cooperation exercise in 2012 with a focus on developing a partnership culture and

modes of working through capacity-building actions. One of the innovative outputs of this project in 2012 was the online registry of companies eligible to provide practical learning places for students. The pilot phase of this registry was set to start in the autumn of 2012.

5.2 LABOUR MARKET AND SOCIAL INCLUSION

The **UNDP** has operated continuous cooperation on employment and social inclusion in the country and some of its most influential projects have been the Employment Programme and Technical Assistance to Support the Government's Active Labour Market Measures.

The UNDP supported the design and implementation of various employment programmes, including several ALMPs on self-employment, training and retraining, and the formalisation of informal businesses. Since its inception in 2007, this programme has enabled over 3,000 people to open their own business or to find a secure job. Moreover, the UNDP evaluated a number of ALMPs over an implementation period from March 2007 to March 2012.

USAID and the **World Bank** have recently embarked upon analysing skills mismatch. USAID developed these activities within the framework of the Macedonia Competitiveness project that recommended a number of activities targeting the supply and demand sides, beginning in 2009.

The World Bank project Labour Markets, Job Creation and Economic Growth included the Demand for Skills Survey (World Bank, 2010b) referred to in Chapter 2. The appropriate national institutions should take ownership of the methodologies used by these projects to boost the robustness of the skills anticipation system in the country.

The **European Commission**, with its IPA IV component, finances the following four projects:

- Preparation for implementation of the European Social Fund, including the effective implementation, monitoring and evaluation of the Operational Programme for Human Resources Development 2007-13. The project started in January 2010 for a 12-month period.
- The twinning project Support for National Policy for Employment aims to develop capacities for long-term forecasting on the labour market and to build capacities for the evaluation and monitoring of employment policies. The project started in September 2011 for an 18-month period.
- Empowerment of local actors for social inclusion on the local level with the main goal of strengthening implementation of social inclusion policies with local municipalities and NGOs within several of these areas. The project mainly encompasses training to enhance the knowledge and skills needed to prepare and implement social inclusion projects. The project started in September 2011 for a 12-month period.
- Finally, the Support for Social Inclusion and Inclusive Labour Market project began implementation in January 2012 for a period of 20 months. The main goals of the project are to enhance knowledge among the relevant institutions working with marginalised groups, to improve the integration of people with disabilities and to contribute to the creation of a shared database for the social services.

The **World Bank** supports social inclusion through its Conditional Cash Transfer project, which provides additional income support to children of parents in receipt of social welfare in return for regular attendance at secondary school. The project started in the 2009/10 school year and is in its third year of implementation.

6. MAIN CHALLENGES, STRATEGIC PRIORITIES AND RECOMMENDATIONS

6.1 HORIZONTAL PRIORITIES AND RECOMMENDATIONS

Little can be achieved in any human resource development policies while there is institutional isolation with slack feedback cycles and review mechanisms. Progress has been seen in the adoption of key strategies in the three broad fields addressed by this report⁴⁷, the structuring of several instances of social partnership and the establishment of inter-institutional councils. However, all the reviews and analytical reports are unanimous in their evaluation of the functioning of these institutions as ineffective. The following recommendations are proposed.

- Better use the Economic and Social Council for critical issues such as informal employment and education-business cooperation. Sector structures for social dialogue, such as the VET and Adult Education Councils must be stimulated and engaged in policy monitoring and review both in their sectors and across sectors.
- Improve the coordination of the many strategies in place to ensure efficient and coherent implementation and monitoring. Recent agreements with social partners enhanced the social dialogue mechanisms and these can be used as a platform for discussing issues related to education, more specifically: VET policies, job creation, unemployment, informal employment, social policy and industrial policy.
- Strengthen monitoring and evaluation mechanisms, including feedback and review of key strategies and policies.

Current approaches and tools for skills anticipation and matching are insufficient and are not combined to provide robust data or foster action. The following recommendation is proposed.

- Improve articulation of new developments (including IPA projects) in long-term forecasting with short-term anticipation approaches, under a coordinating unit with the technical and human capacity for interpretation, reporting and high-quality dissemination, in particular for use in employment and education policy.

6.2 EDUCATION AND TRAINING

The former Yugoslav Republic of Macedonia faces structural challenges in the field of education and training in a lifelong learning perspective.

Skills and employment

Skills shortages affect modern and dynamic firms and, if not addressed, the skills factor may become a constraint to further modernisation of the economy. Investment in the right set of skills, including soft skills, is necessary in order to reduce mismatch and foster employment.

Currently, VET programmes are theory-based and provide limited practical and soft skills. VET policy continues to be limited to schools, missing the potential of other flexible and relevant forms of skills development in more practical frameworks.

Participation in secondary VET continues to represent almost 60% of total enrolment in upper-secondary education; therefore the initial VET system is an important contributor to the stock of human resources and places high stakes upon governance of the VET system. The VET Centre needs to expand its potential and improve its performance as the leading body. Work planned for a new VET strategy in 2012 should provide an opportunity to build up social dialogue and collaboration around a relevant common objective.

The following recommendations are proposed.

Institutional capacity and leadership in VET

- Reinforce the institutional capacity of the VET Centre; resolve issues to provide the entity with the legitimate autonomy required for it to adequately exercise its mandate, with particular attention on strategic functions.
- Support implementation of the VET Centre strategy for excellence (VET Centre, 2010) and the recommendations of the VET-4 evaluation (ETF, 2010b).
- Allocate accountability for VET policy and the activities of the VET centre to a pertinent political level.

⁴⁷ National Programme for the Development of Education 2005-15; Strategy for Adult Education; National Strategy for Employment 2015 (2011); National Employment Action Plan 2011-13; National Strategy for Reduction of Poverty and Social Exclusion 2010-20 (2010).

Relevance for labour market and for lifelong professional development

- Provide support to strengthen the relevance of the formal VET system to the labour market by diversifying the offer of training pathways, introducing high-quality efficient vocational and technical programmes with stronger work-based components and strengthening interactions with various types of learning systems and providers.
- Implement measures to support matching, based on reliable anticipation of skills needs, widely accessible and proper career guidance and sustained implementation of measures geared towards the growth of youth entrepreneurship.
- Implement measures to strengthen the qualifications system and establish a comprehensive framework, taking into consideration relevant developments in the EU, notably the EQF Recommendation, as well as the experiences of EU cooperation in the field.

Adult learning

- Articulate adult learning transversally across policies and sectors and across social purposes. Adult learning must contribute better to minimizing the skills mismatch in the short and medium term. It must also strengthen the employability of young and experienced job seekers and encourage the inactive to enter or re-enter the labour market. Given the rapidly aging population, the productive capacity of the country, its competitiveness and productivity will be dependent upon the ability of the adult learning system to fulfil its role.

Regional education initiatives

- Provide support for strategic initiatives of municipalities such as the Municipal Education Strategic Plans in Kumanovo as these have the potential to spark more vibrant change across the country, at regional and local level.

Quality of education

Initial education

Declining enrolment rates, weak performance in international student assessments and numerous cases of unsatisfactory scores in integral school evaluations continue to blight the education system and leave students unprepared to progress and move on to full entry into active life. The following recommendations are proposed.

- Adequately resource, implement and review current reforms that address quality, access and social inclusion.
- Increase participation in early childhood education and care and prevent early school leaving, with special attention on female learners. The problem of declining enrolment rates in primary and lower secondary

education must be addressed with sustained and mutually reinforcing measures and incentives.

- Give priority to the quality of education outcomes, the development of key competences and advances toward social inclusion and desegregated education. These are important for establishing a more consistent basis for lifelong learning among younger generations, helping to equip them with the competences essential for personal and professional life such as: critical thinking, autonomy of action, cooperation in groups and efficient learning. This approach should be spread through more involvement of broader society and the use of more cooperative learning forms in order for learners to not only 'learn to read', but also 'read to learn'.
- Strengthen the system of integral and internal school evaluation by including concrete questions on entrepreneurial learning and inclusive education in school performance quality indicators.

Tertiary education

The growing participation in tertiary education is commendable and indispensable, but the two critical issues of the quality of higher education across the system and the employability of graduates remain to be addressed. The employability of tertiary graduates will gradually become a point of tension as the share of labour with higher education increases in an environment of very high unemployment. Any newly adopted legislation must be accompanied by implementation mechanisms and feedback. The following recommendations are proposed.

- Review and reinforce the policies and practices of university-business cooperation in the country. Support the dissemination of good practice by involving business centres, VET schools, other training providers and local communities.
- Support youth entrepreneurship initiatives at universities. Strengthen networking and information centres on student entrepreneurship initiatives. Develop entrepreneurial learning in the university curriculum and link selected students' research activities with entrepreneurship projects.
- Reinforce career guidance and information: provide a new impetus to enable this to play a more active role in the student life cycle and become a real interface with the world of work. Promote the use of new technologies and social networks to disseminate new initiatives, ideas and information.

6.3 EMPLOYMENT

The former Yugoslav Republic of Macedonia faces the following challenges in the field of employment.

High long-term unemployment

The large majority of the unemployed are unable to get a job for at least one year, and for over 60% this situation lasts for more than four years. This phenomenon affects

almost all population groups, particularly young people, including university graduates, women, especially from ethnic minorities, and the older age groups.

Low female labour market participation and high inactivity among women

The female activity rate is increasing but at a slow pace. Inactivity among women is strikingly high (more than two-thirds of all inactive people), notably among minority ethnic groups.

High youth unemployment

The former Yugoslav Republic of Macedonia has the highest youth unemployment in the Western Balkans and this, combined with increasing youth inactivity, calls for action. The factors behind these trends can be associated with various policy fields, and further analysis of the issue is necessary to inform better policies.

Low job creation

One of the main problems in the labour market is the low capacity of the economy for job creation. The government response has included the stimulation of foreign direct investment; deregulation of labour legislation; lowering of the cost of employment; encouraging the creation of SMEs; and investment in human resources, especially in higher education.

The impact of these measures on job creation has been lower than expected, which can partly be justified by the crisis-related contraction of foreign direct investment. Access to financing and support through training remains difficult for SMEs. Self-employment is considered as a last resort for many and remains a fragile sector.

Low coverage of ALMMs and insufficient human capacity of the ESA

The coverage of ALMMs is minimal: in 2010 only 2.5% of the registered unemployed participated in ALMMs. Although they have been trained on the basis of the New Service Model, ESA staff are overloaded.

Informal employment

The impact of the large informal economy and informal employment is tangible and government policies to stimulate formalisation of businesses need continuity and evaluation. Informal workers are deprived of social rights and protection and this issue cannot be overlooked.

Lack of capital, weak inspection mechanisms and cultural-behavioural features all contribute to the complex causes of informality that defy specific policies and measures such as simplified procedures and lower social

contributions. The features and causes of pervasive informality need to be researched more thoroughly in terms of: (i) the interactions and connections among enterprises, in the national and in global contexts that nurture the informal economy; and (ii) informal employment in the services and industrial sector.

Links between the labour market and education

The link between the labour market and the education system, particularly the VET system, is advancing and the world of education and world of work both recognise that there is room for more and better cooperation. Reform in VET needs to embrace all forms and levels of this sector. Legislation to enhance the relevant involvement of employers and social partners in education is in place and includes incentives but is reported to have gaps and only a limited impact.

The following recommendations are proposed.

Combat long-term unemployment with particular emphasis on young people (by extending coverage to age 34 years); women (unemployed women from all national minorities, age groups and rural areas); the Roma population; and older age groups

Long-term unemployment can affect all age groups and measures must consider actions tailored to the various groups in view of the fact that evaluation reports emphasise the need for better targeting (Jackman and Corbanese, 2007, p. 25).

The labour market participation of women is a major challenge that calls for specific measures. These measures must consider the social and family context of women.

Measures on self-employment and subsidised jobs should not be limited to young people but should be extended to the prime age group.

In sum:

- Reinforce analytical work to explore: (i) long-term unemployment: all factors and aspects of long-term unemployment, including age, gender, ethnicity and experience; and (ii) youth labour market participation.
- Guidance and counselling services: (i) reinforce and expand ESA services for long-term unemployed in the categories of young people, women and the elderly; and (ii) establish mechanisms for monitoring career guidance and counselling services provided by education institutions such as secondary schools and universities.
- Reinforce measures to stimulate self-employment, subsidised employment and employment in SMEs.
- Increase the scope and coverage of internships for VET and university students and develop mechanisms to monitor and evaluate the longer-term impact of internships.

- Increase specific training programmes targeted towards the long-term unemployed, considering age, gender and ethnicity. Develop courses on key competences and skills for employment targeted towards the long-term unemployed.
- Improve the quality, adequacy and delivery of training for the unemployed, by supporting providers to develop better programmes and train teachers as trainers for adult education. This action should be implemented in collaboration with the Centre for Adult Education and the VET Centre.

Increase ESA services, particularly ALMMs, by increasing the budget and staff numbers in order to cover a greater percentage of the unemployed (for example with a target of coverage for 20% of the total registered unemployed in the first three years)

Given the high absolute number of unemployed, there is an urgent need to tackle unemployment through an increased budget and ALMMs. Kjosev (2010) strongly recommends that the ESA ‘increase the search activity for the unemployed, improve the accuracy of the unemployment registry, pursue a more individualised approach to targeted groups of the unemployed (particularly guidance and counselling services) and boost self-help services for others with better prospects of regaining employment. Given the high registered unemployment and staff and time limitations the ESA should make basic vacancy information as freely available as possible, maximising the interactive job broking’.

Findings from the monitoring and evaluation of ALMMs should be taken into consideration in their review and programming of ALMMs in order to improve relevance and effectiveness.

In sum:

- Increase the budget for ALMMs.
- Implement better tailored training programmes for disadvantaged individuals amongst the registered unemployed.
- Strengthen monitoring and evaluation and links with policy and programme review.
- Increase ESA staff capacity, especially among front line officers and counsellors in order to improve the individual orientation of services.
- Strengthen analytical work on critical issues, such as inactivity in vulnerable groups (older age groups, minorities) and women.

Enhance support to SMEs and the self-employed to encourage more job creation

- Start-up SMEs risk failure in their initial years of operation but business support services and training can minimise vulnerabilities in the enterprise life cycle. SME growth should be supported through consulting services, export information, training needs analysis and incentives for staff training, managerial training and access to finance for investments. Self-employment needs support in the form of counselling, entrepreneurial training and credits targeted towards young people.

- Support SMEs that provide training-internships in line with adopted legislation.
- Encourage forward movement on cooperation between the Ministry of Labour and Social Policy, the Employment Agency and the Agency for the Promotion of Entrepreneurship as planned in the National Operational Plan on Employment 2011. More joint initiatives are needed with youth entrepreneurship centres in universities and business centres in municipalities in order to find new pools of innovative approaches on job creation.

6.4 SOCIAL INCLUSION

It is essential for the country to undertake more in-depth studies regarding local social needs and priorities for vulnerable populations in order for the country to improve the efficacy and scope of the current social inclusion policy and to avoid ad-hoc and reactive policy solutions. In addition, it is also vital for the country to advocate an independent evaluation of the accessibility and coverage of the social protection programmes in order to assess the responsiveness and adequacy of the current social protection system.

These actions can also be used as key mechanisms in measuring vulnerable and socially excluded groups and adequate and responsive social inclusion policies and programmes. In addition to this, more focused attention must be placed on the fields of education, employment and regional development; all areas in which the vulnerable categories should be mainstreamed in forthcoming policies and measures.

Improve the scope and quality of inclusive and non-segregated education

The following recommendations are proposed.

- Increase the number of pre-school facilities, particularly in the least developed regions, mountainous and rural areas, accompanied by greater financial incentives for attracting more experienced teachers.
- Improve conditions in special schools (supply of special study materials, child-friendly environments), with emphasis on transferring Roma children with no disabilities into mainstream schools. This should be accompanied by financial incentives and the provision of study equipment for Roma children, children from jobless households or households in receipt of social assistance.
- Increase the number of secondary education facilities in more distant and rural locations, based on the educational needs of the more vulnerable populations and in accordance with the demands of the regional labour market.
- Municipal authorities must make more effective use of available opportunities and their mandate to develop mixed school extra-curricular activities and stimulate more integrated education from an early age in order to stem the tendency towards increasing ethnic segregation in education.

Improve the compatibility and adequacy of employment measures with the absorption capacities of the most vulnerable categories in the labour market

The following recommendations are proposed.

- Provide active, adequately tailored employment opportunities for the registered unemployed, including elementary courses and vocational classes for the population with no elementary or incomplete elementary education.
- Provide outreach courses and vocational classes among less-represented ethnic communities, mainly targeted towards women with no education. This should be accompanied by support for employment opportunities focused on fields relevant to the capabilities and skills of these women such as the purchasing of craft work or other domestic products.
- Financial support for the formalisation of Roma businesses especially in terms of undeclared Roma workers, as well as support for employment creation within disadvantaged Roma localities.

Improve regional disparities through greater emphasis on regional social developmental projects

The following recommendations are proposed.

- Provide financial allocations and greater infrastructure support to the Polog and North-east regions in efforts to overcome gaps in employment and social exclusion.
- Allow greater flexibility and authority at local levels in the tailoring and implementation of local strategies and local actions plans.
- Make the eight regional strategies for combating poverty and social exclusion operational, focusing on the identification of the main vulnerable groups in each region, the main priorities for their inclusion in the relevant fields (employment, education, social welfare, etc.) and detail consequent action plans with indicators and financial plans.

ACRONYMS

BEEPS	Business Environment and Enterprise Performance Survey
ALMMs	Active labour market measures
ALMPs	Active labour market policies
BDE	Bureau for the Development of Education
EBRD	European Bank for Reconstruction and Development
ECA	Europe and Central Asia
ECTS	European Credit Transfer and Accumulation System
EQF	European Qualifications Framework
ESA	Employment Service Agency
ETF	European Training Foundation
EU	European Union
GDP	Gross domestic product
ICT	Information and communication technology
IMF	International Monetary Fund
IPA	Instrument for Pre-accession Assistance
ISCED	International Standard Classification of Education
LFS	Labour Force Survey
MKD	Macedonian denar
MoES	Ministry of Education and Science
NATO	North Atlantic Treaty Organisation
NGO	Non-governmental organisation
NQF	National qualifications framework
OECD	Organisation for Economic Cooperation and Development
OSCE	Organisation for Security and Cooperation in Europe
PIRLS	Progress in International Reading Literacy Study
PISA	Programme for International Students Assessment
R&D	Research and development
SME	Small and medium-sized enterprise
SSO	State Statistical Office

TIMSS	Trends in International Mathematics and Science Study
UNDP	United Nations Development Programme
USAID	United States Agency for International Development
USD	US dollar
VET	Vocational education and training
VET-3	Three-year vocational education and training
VET-4	Four-year vocational education and training

BIBLIOGRAPHY

- Angel-Urdinola, D., *Why are low-skilled women from minority groups economically inactive in Macedonia?*, 2008. Last accessed January 2013 at: <http://siteresources.worldbank.org/INTGENDER/Resources/gnewsletterp7.pdf>
- Bartlett, W., European Training Foundation, *Skills anticipation and matching systems in transition and developing countries: Conditions and challenges*, ETF, Turin, 2012.
- Bruges Communiqué, *The Bruges Communiqué on enhanced European cooperation in vocational education and training for the period 2011-2020*, Bruges, 2010. Last accessed 30 November 2012 at: http://ec.europa.eu/education/lifelong-learning-policy/doc/vocational/bruges_en.pdf
- Cedefop (European Centre for the Development of Vocational Training), *Development of national qualifications frameworks in Europe*, Working paper No 12, October 2011, Publications Office of the European Union, Luxembourg, 2012. Last accessed 21 January 2012 at: www.cedefop.europa.eu/EN/publications/19313.aspx
- Council of the European Union, 'Council conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training (ET 2020)', *Official Journal of the European Union*, C 119, 2009, pp. 2-10. Last accessed 31 January 2012 at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52009XG0528%2801%29:EN:NOT>
- Council of the European Union, *Eighth meeting of the Stabilisation and Association Council between the former Yugoslav Republic of Macedonia and the EU*, Joint press release, Brussels, 23 January, 2012. Last accessed 20 February 2012 at: www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/EN/foraff/127481.pdf
- Crnkovic-Pozajic, S., 'How to improve activation measures in IPA countries', Draft document presented at ETF workshop, 16 February, 2011 (unpublished).
- CRPM (Centre for Research and Policy Making), *Constraints to labour force participation in Macedonia: A qualitative approach among women from less represented ethnic groups*, World Bank, Skopje, 2008.
- DecadeWatch, *MK Decade Watch 2010: Roma activists assess the progress of the decade for Roma inclusion 2005-2015*, Initiative for Social Change, Skopje, 2010. Last accessed January 2013 at: www.romadecade.org/files/downloads/Decade%20Watch%202010/Decade%20Watch_2010_Macedonia_EN.pdf
- Donevska, M., Bogoevska, N. and Trbojevic, S., 'Report from the research on reasons for irregular attending of primary education among Roma children', Foundation Open Society – Macedonia, Skopje, 2010.
- EBRD (European Bank for Reconstruction and Development) and World Bank, *BEEPS at-a-glance 2008: FYR Macedonia*, World Bank, 2010. Last accessed January 2013 at: http://siteresources.worldbank.org/INTECAREGTOPANTCOR/Resources/704589-1267561320871/FYR_Macedonia_2010.pdf
- Employment Service Agency of the Republic of Macedonia, 'New service model handbook', Skopje, undated.
- Employment Service Agency of the Republic of Macedonia, 'National report on the skills needs analysis of the labour market in the Republic of Macedonia for 2009/2010', Skopje, 2009.
- Employment Service Agency of the Republic of Macedonia, 'Review of unemployed persons according to education, condition as of 31.08.2011', Skopje, 2011.
- ETF (European Training Foundation), *Education & business: Former Yugoslav Republic of Macedonia*, ETF, Turin, 2010a.
- ETF (European Training Foundation), 'Collaborative evaluation of the impact of the reformed four-year secondary vocational education', Working paper, ETF, Turin, 2010b (unpublished).
- European Commission, *2011 Pre-accession economic programmes of candidate countries: EU Commission assessments*, Occasional papers 80, Directorate-General for Economic and Financial Affairs, Brussels, 2011a. Last accessed January 2013 at: http://ec.europa.eu/economy_finance/publications/occasional_paper/2011/pdf/ocp80_en.pdf

- European Commission, *The former Yugoslav Republic of Macedonia 2011 progress report*, Commission staff working paper, SEC(2011) 1203 final, Brussels, 2011b. Last accessed January 2013 at: http://ec.europa.eu/enlargement/pdf/key_documents/2011/package/mk_rapport_2011_en.pdf
- European Commission, *Progress towards the common European objectives in education and training: Indicators and benchmarks 2010/2011*, Commission staff working document, Brussels, 2011c. Last accessed 2 November 2011 at: http://ec.europa.eu/education/lifelong-learning-policy/doc/report10/report_en.pdf
- European Commission, Accompanying document to *Education and training for a smart, sustainable and inclusive Europe: Analysis of the implementation of the strategic framework for European cooperation in education and training (ET2020) and the European and national levels*, Commission staff working document, SEC(2011) 1607 final, Brussels, 2011d. Last accessed January 2013 at: www.europa-nu.nl/9353000/1/4nvgs5kjg27kof_j9vvikqpopjt8zm/vivi63r8tvsp/f=/18577_11_add_1.pdf
- European Parliament and Council, 'Recommendation of 18 December 2006 on key competences for lifelong learning (2006/962/EC)', *Official Journal of the European Union*, L 394, 2006, pp. 10-18. Last accessed 29 January 2012 at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:394:0010:0018:EN:PDF>
- Eurostat, *Early leavers from education and training by sex*, [online]. Last accessed 5 July 2012 at: http://epp.eurostat.ec.europa.eu/tgm/refreshTableAction.do?tab=table&plugin=1&pcode=t2020_40&language=en
- Eurostat, *Headline indicators*, [online]. Last accessed 3 December 2012 at: http://epp.eurostat.ec.europa.eu/portal/page/portal/europe_2020_indicators/headline_indicators
- Eurostat, Statistics database, [online]. Last accessed January 2013 at: http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database
- Eurostat, *Tertiary educational attainment by sex, age group 30-34*, [online]. Last accessed 5 July 2012 at: http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=1&language=en&pcode=t2020_41
- Eurostat, *Employment and unemployment (Labour Force Survey)*, [online], 2010. Last accessed 25 October 2011 at: http://epp.eurostat.ec.europa.eu/portal/page/portal/employment_unemployment_ifs/data/database
- Eurostat, 'EU-27 employment and unemployment levels stable', *Statistics in focus*, 8/2011, 2011. Last accessed 20 May 2011 at: http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-SF-11-008/EN/KS-SF-11-008-EN.PDF
- Feiler, L., Holmes, K. and Viertel, E., European Training Foundation, *ETF country analysis: The former Yugoslav Republic of Macedonia*, ETF, Turin, 2009.
- Gerovska Mitev, M., *The well-being of children and young people in difficult economic times*, UNICEF, Skopje, 2010.
- Gerovska Mitev, M. (ed.), *Report on poverty and social exclusion in the Republic of Macedonia 2010*, Macedonian Anti-Poverty Platform, Skopje, 2011.
- Government of the Republic of Macedonia, *National strategy for poverty reduction in the Republic of Macedonia*, Skopje, 2002.
- Government of the Republic of Macedonia, *Report on the progress towards the Millennium Development Goals*, UNDP, Skopje, 2009. Last accessed January 2013 at: www.undp.org.mk/content/Publications/MDG%20Report%2009%20ENG.pdf
- Government of the Republic of Macedonia, *Education*, Government's work programme in the education field for the period 2011-2015, [online], Skopje, 2011. Last accessed 30 January 2012 at: <http://vlada.mk/?q=node/271&language=en-gb>
- Hadzi-Zafirova, Z., 'Macedonia's textbook trauma: Risky experiments and wacky geography spur a massive review', *Transitions online*, [online], 30 November, 2011. Last accessed 3 February 2012 at: www.tol.org/client/article/22867-macedonias-textbook-trauma.html
- IEA (International Association for the Evaluation of Educational Achievement), *TIMSS 2011 International results in mathematics - Chapter 1*, 2012a. Last accessed 8 March 2013 at: http://timssandpirls.bc.edu/timss2011/downloads/T11_IR_M_Chapter1.pdf

- IEA (International Association for the Evaluation of Educational Achievement), *TIMSS 2011 International results in science - Chapter 1, 2012b*. Last accessed 8 March 2013 at: http://timssandpirls.bc.edu/timss2011/downloads/T11_IR_S_Chapter1.pdf
- IES (Institute of Education Sciences), *Trends in International Mathematics and Science Study (TIMSS): Mathematics and science achievement of eight-graders in 1999*, [online], IES, 1999. Last accessed 2 November 2011 at: http://nces.ed.gov/timss/results99_1.asp
- IES (Institute of Education Sciences), *Trends in International Mathematics and Science Study (TIMSS): Differences in average mathematics scale scores of eighth-grade students, by country – 1995, 1999 and 2003*, [online], IES, 2003a. Last accessed 2 November 2011 at: <http://nces.ed.gov/timss/TIMSS03Tables.asp?Quest=4&Figure=7>
- IES (Institute of Education Sciences), *Trends in International Mathematics and Science Study (TIMSS): Differences in average science scale scores of eighth-grade students, by country – 1995, 1999 and 2003*, [online], IES, 2003b. Last accessed 2 November 2011 at: <http://nces.ed.gov/timss/TIMSS03Tables.asp?Quest=4&Figure=8>
- IMF (International Monetary Fund), *FYR Macedonia – 2011 Article IV consultation: Concluding statement of the mission*, [online], Skopje, 13 December, 2011. Last accessed 25 January 2012 at: www.imf.org/external/np/ms/2011/121311.htm
- International Crisis Group, *Macedonia: Ten years after the conflict*, Europe Report No 212, 2011. Last accessed 25 February 2012 at: www.crisisgroup.org/en/regions/europe/balkans/macedonia/212-macedonia-ten-years-after-the-conflict.aspx
- Jackman, R. and Corbanese, V., *Evaluation of active labour market measures and employment programme in Macedonia*, UNDP, August, 2007.
- Kjosev, S., *EEO quarterly report: Former Yugoslav Republic of Macedonia*, March 2010, European Employment Observatory, 2010a.
- Kjosev, S., *EEO quarterly report: Former Yugoslav Republic of Macedonia*, June 2010, European Employment Observatory, 2010b.
- Kjosev, S., *EEO quarterly report: Former Yugoslav Republic of Macedonia*, September 2010, European Employment Observatory, 2010c.
- Kjosev, S., *EEO review: Self-employment, 2010*, European Employment Observatory, 2010d. Last accessed January 2013 at: www.eu-employment-observatory.net/resources/reviews/FYROM-SERvw2010.pdf
- Kjosev, S., *EEO review: Youth employment measures, 2010*, European Employment Observatory, 2010e. Last accessed January 2013 at: www.eu-employment-observatory.net/resources/reviews/FYROM-YMRvw2010.pdf
- Kostadinov, A., *Labour market policies in Macedonia*, Centre for Economic Analyses, Skopje, 2009.
- Kuddo, A., *Labor laws in Eastern European and Central Asian countries: Minimum norms and practices*, World Bank, Washington, DC, 2009.
- Lehmann, H., *Macedonia's accession to the EU and the labour market: What can be learned from the new Member States?*, IZA policy paper No 14, Institute for the Study of Labour, Bonn, 2010. Last accessed 30 November 2012 at: <http://ftp.iza.org/pp14.pdf>
- Ludwig Boltzmann Institute of Human Rights, *Study on poverty and social exclusion in the Republic of Macedonia: Local social problems and needs*, Ludwig Boltzmann Institute, Skopje, 2011.
- Ministry of Labour and Social Policy, Website. Last accessed January 2013 at: www.mtsp.gov.mk
- Ministry of Labour and Social Policy, *Policies for tackling the problems of the socially excluded population*, MoLSP, Skopje, 2004.
- Ministry of Labour and Social Policy, *Multi-annual Operational Programme for Human Resources Development 2007-2013*, MoLSP, Skopje, 2007.
- Ministry of Labour and Social Policy, *National action plan for employment 2009-2010*, MoLSP, Skopje, 2008.

- Ministry of Labour and Social Policy, *National action plan for employment 2011*, MoLSP, Skopje, 2010a.
- Ministry of Labour and Social Policy, *National strategy for the alleviation of poverty and social exclusion*, MoLSP, Skopje, 2010b.
- Ministry of Labour and Social Policy, *Operational plan of active programs and measures for employment for 2010*, MoLSP, Skopje, 2010c.
- Ministry of Labour and Social Policy, *Report on the impact assessment of the active labour market measures: Formalization of existing businesses implemented as a part of the governmental operational plan for ALMM for 2008*, MoLSP, Skopje, 2010d.
- Ministry of Labour and Social Policy, *National strategy for employment of the Republic of Macedonia 2015*, MoLSP, Skopje, 2011a.
- Ministry of Labour and Social Policy, *National employment action plan of the Republic of Macedonia 2011-2013*, MoLSP, Skopje, 2011b.
- MoES (Ministry of Education and Science), *National programme for the development of education in the Republic of Macedonia 2005-2015 with accompanying programme documents*, MoES, Skopje, 2005.
- MoES (Ministry of Education and Science), *Development and state of the adult learning and education (ALE): National report of the Republic of Macedonia*, MoES, Skopje, 2008. Last accessed 28 November 2011 at: www.unesco.org/fileadmin/MULTIMEDIA/INSTITUTES/UIIL/confintea/pdf/National_Reports/Europe%20-%20North%20America/The_former_Yugoslav_Republic_of_Macedonia.pdf
- MoES–SEI (Ministry of Education and Science–State Education Inspectorate), ‘Indicators for quality of work among schools’, Working version, USAID, Skopje, 2009.
- MoES–SEI (Ministry of Education and Science–State Education Inspectorate), *Quality of the educational process in the primary and secondary schools in the Republic of Macedonia 2009/10*, MoES, Skopje, 2010.
- MoES–SEI (Ministry of Education and Science–State Education Inspectorate), *School performance quality indicators*, MoES, Skopje, 2011.
- Mojsoska-Blazevski, N., ‘Supporting strategies to recover from the crises in South Eastern Europe: The case of FYR Macedonia’, 2011 (unpublished).
- Mojsoska-Blazevski, N., Najdova, J., Stojkov, A. and Asenov, L., *Labour market in the former Yugoslav Republic of Macedonia*, 2009.
- NCES (National Centre for Education Statistics), *The reading literacy of U.S. fourth-grade students in an international context: Results from the 2001 and 2006 Progress in International Reading Literacy Study (PIRLS)*, Supplemental tables, NCES, 2007. Last accessed 29 October 2011 at: <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2008017>
- Nesporova, A., *Employment recovery and job quality in Eastern Europe and Central Asia*, International Labour Office, Geneva, 2011.
- Novkovska, B., *Measuring non-standard and informal employment in the Republic of Macedonia*, 2009. Last accessed January 2013 at: <http://previous.wiego.org/reports/statistics/nov-2008/Novkovska.pdf>
- OECD (Organisation for Economic Cooperation and Development), *PISA 2000 technical report*, OECD, Paris, 2001.
- OECD (Organisation for Economic Cooperation and Development), *Literacy skills for the world of tomorrow: Further results from PISA 2000*, OECD, Paris, 2003. Last accessed 30 October 2011 at: www.oecd.org/document/21/0,3746,en_32252351_32236159_33688661_1_1_1_1,00.html
- OECD (Organisation for Economic Cooperation and Development), *Investment Reform Index 2010: Monitoring policies and institutions for direct investment in South-East Europe*, OECD Publishing, Paris, 2010.
- OECD (Organisation for Economic Cooperation and Development), *Education at a glance 2011: OECD indicators*, OECD Publishing, Paris, 2011a. Last accessed 2 November 2011 at: www.oecd.org/document/2/0,3746,en_2649_39263238_48634114_1_1_1_1,00.html

- OECD (Organisation for Economic Cooperation and Development), *AHELO – Assessment of higher education learning outcomes*, OECD, Paris, 2011b. Last accessed January 2013 at: www.oecd.org/education/skills-beyond-school/45755875.pdf
- OECD (Organisation for Economic Cooperation and Development), *OECD Programme for the International Assessment of Adult Competencies (PIAAC)*, [online]. Last accessed 2 November 2011 at: www.oecd.org/document/28/0,3746,en_2649_33723_44429596_1_1_1_1,00.html
- OECD, European Commission, ETF and EBRD, *SME Policy Index 2009: Progress in the implementation of the European Charter for Small Enterprises in the Western Balkans*, OECD, Paris, 2009. Last accessed January 2013 at: www.oecd.org/daf/privatesectordevelopment/westernbalkansprogressintheimplementationoftheeuropeancharterforsmallenterprises2009smepolicyindex.htm
- Pavlevski, A., 'Greek businesses see plenty to like about Macedonia', *Southeast European Times*, [online], Skopje, 20 February, 2012. Last accessed 28 February 2012 at: www.setimes.com/cocoon/setimes/xhtml/en_GB/features/setimes/features/2012/02/20/feature-02
- Quintini, G., *Over-qualified or under-skilled: A review of existing literature*, OECD social, employment and migration working papers No 121, OECD, Paris, 2011. Last accessed 29 November 2012 at: www.oecd.org/els/48650026.pdf
- Rauhvargers, A., Deane, C. and Pauwels, W., *Bologna Process stocktaking report 2009*, 2009. Last accessed 6 November 2011 at: www.ond.vlaanderen.be/hogeronderwijs/bologna/conference/documents.htm
- Roma Education Fund, *Advancing education of Roma in Macedonia*, REF, Budapest, 2007.
- Sondergaard, L. and Murthi, M., *Skills, not just diplomas: Managing education for results in Eastern Europe and Central Asia*, World Bank, Washington, DC, 2012. Last accessed 2 November 2011 at: http://siteresources.worldbank.org/ECAEXT/Resources/101411_FullReport.pdf
- SSO (State Statistical Office), *Labour Force Survey data 2009*, SSO, Skopje, 2010.
- SSO (State Statistical Office), *Women and men in the Republic of Macedonia*, SSO, Skopje, 2010. Last accessed 2 November 2011 at: www.stat.gov.mk/PrikaziPublikacija_en.aspx?id=23&rbr=78
- SSO (State Statistical Office), *Primary, lower secondary and upper secondary schools at the end of the school year 2009/2010*, News release No 2.1.11.07, SSO, Skopje, April, 2011. Last accessed January 2013 at: www.stat.gov.mk/pdf/2011/2.1.11.07.pdf
- SSO (State Statistical Office), *Population*, [online], SSO, Skopje, 2011a. Last accessed 30 October 2011 at: www.stat.gov.mk/OblastOpsto_en.aspx?id=2
- SSO (State Statistical Office), *Statistical review: Population and social statistics*, SSO, Skopje, 2011b.
- SSO (State Statistical Office), *Statistical yearbook of the Republic of Macedonia 2011*, SSO, Skopje, 2011c. Last accessed 6 November 2011 at: www.stat.gov.mk/PrikaziPublikacija_1_en.aspx?rbr=246
- SSO (State Statistical Office), *Macedonia in figures 2012*, SSO, Skopje, 2012a. Last accessed January 2013 at: www.stat.gov.mk/Publikacii/Mak_Brojki_2012_A.pdf
- SSO (State Statistical Office), *Monthly statistical bulletin of the Republic of Macedonia*, XIX, No 01, SSO, Skopje, 2012b. Last accessed 20 February 2012 at: www.stat.gov.mk/Publikacii/Bilten_01_2012_A.pdf
- Trajkovski, V., *Study about persons with disabilities in Macedonia*, UNDP/UNFPA, Skopje, 2008. Last accessed January 2013 at: www.undp.org.mk/content/projects/Final%20Report%20on%20Persons%20with%20Disabilities%20SGIC%20Joint%20P.pdf
- UIS (UNESCO Institute for Statistics), *Global education digest 2011: Comparing education statistics across the world*, UIS, 2011. Last accessed 2 March 2012 at: www.uis.unesco.org/Library/Documents/global_education_digest_2011_en.pdf
- UNDP (United Nations Development Programme), *People centred analyses*, UNDP, Skopje, 2008.
- UNDP (United Nations Development Programme), *People centred analyses*, UNDP, Skopje, 2010.

- UNIFEM (United Nations Development Fund for Women), *The position of the physically disabled persons on the labor market*, UNIFEM, Skopje, 2009.
- U.S. Department of State, *U.S. relations with Macedonia*, Background note, [online], 2012. Last accessed 20 February 2012 at: www.state.gov/r/pa/ei/bgn/26759.htm
- USAID (United States Agency for International Development), *Taking steps to a 21st century workforce: Macedonia*, 2009. Last accessed January 2013 at: <http://macedonia.usaid.gov/Documents/Macedonia%20WFD%20report%20April%202009.pdf>
- USAID (United States Agency for International Development), *Macedonia gap analysis*, USAID, 2011. Last accessed January 2013 at: http://transition.usaid.gov/locations/europe_eurasia/wp/mcp_gap_analyses-macedonia_march_2011.pdf
- USAID Macedonia, 'Performance assessment of the Vocational Education and Training Centre: Findings and recommendations', Draft final report, USAID, Skopje, 2009.
- USAID Macedonia, 'Exit evaluation report', USAID, Skopje, 2011.
- VET Centre (Vocational Education and Training Centre), *Education plans*, VET Centre, Skopje, 2007.
- VET Centre (Vocational Education and Training Centre), *Towards excellence in institutional performance: Strategy for development of the Vocational Education and Training Centre 2010-2015*, VET Centre, Skopje, 2010. Last accessed 2 February 2012 at: www.csoo.edu.mk/eng/index.php?option=com_content&task=blogcategory&id=58&Itemid=168
- World Bank, 'Poverty assessment paper for the Republic of Macedonia', Mimeo, World Bank, Washington, DC, 2007.
- World Bank, *Active labor market programs in FYR Macedonia: A policy note*, Report No 45258-MK, Human Development Sector Unit – Europe and Central Asia, World Bank, 2008.
- World Bank, *FYR Macedonia – Poverty, jobs and firms: An assessment for 2002-2006*, Report No 48510-MK, Poverty Reduction and Economic Management Unit – Europe and Central Asia, World Bank, 2009.
- World Bank, *Country partnership strategy for former Yugoslav Republic of Macedonia for the period FY11-FY14*, Report No 54928-MK, South East Europe Country Unit – Europe and Central Asia, World Bank, 2010a.
- World Bank, *Demand for skills in FYR Macedonia*, Working paper 70114, World Bank, 2010b.
- World Bank, *Ease of Doing Business in Macedonia, FYR 2012*, [online], 2011a. Last accessed 25 January 2012 at: www.doingbusiness.org/data/exploreeconomies/macedonia,-fyr/
- World Bank, *Macedonia, former Yugoslav Republic of – Education modernization project: Implementation completion and results report*, World Bank, Washington, DC, 2011b. Last accessed January 2013 at: <http://web.worldbank.org/external/projects/main?pagePK=51351038&piPK=51351152&theSitePK=40941&projid=P066157>
- World Economic Forum, *The global competitiveness report 2010-2011*, WEF, Geneva, 2010. Last accessed 1 June 2011 at: www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2010-11.pdf

EUROPEAN TRAINING FOUNDATION

FORMER YUGOSLAV REPUBLIC OF MACEDONIA – REVIEW OF HUMAN RESOURCES DEVELOPMENT

Luxembourg: Publications Office of the
European Union

2013 – 96 pp. – 21.0 x 29.7 cm

ISBN: 978-92-9157-607-4
doi:10.2816/1818

HOW TO OBTAIN EU PUBLICATIONS

Our priced publications are available from EU Bookshop (<http://bookshop.europa.eu>), where you can place an order with the sales agent of your choice.

The Publications Office has a worldwide network of sales agents. You can obtain their contact details by sending a fax to (352) 29 29-42758.

CONTACT US

Further information can be found on the ETF website:

www.etf.europa.eu

For any additional information please contact:

European Training Foundation
Communication Department
Villa Gualino
Viale Settimio Severo 65
I – 10133 Torino

E info@etf.europa.eu
F +39 011 630 2200
T +39 011 630 2222



TA-31-13-856-EN-C



■ Publications Office

ISBN 978-92-9157-607-4



9 789291 576074