

# TORINO PROCESS 2012

## FORMER YUGOSLAV REPUBLIC OF MACEDONIA



**Unedited version**

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## TORINO PROCESS 2012

### Former Yugoslav Republic of Macedonia

#### Table of contents

<b>Torino process 2012</b>	<b>1</b>
<b>Executive summary</b>	<b>3</b>
<b>The process</b>	<b>3</b>
<b>Major initiatives relevant for VET policy</b>	<b>6</b>
<b>A. Vision for VET system development</b>	<b>7</b>
<b>B. External efficiency: addressing demographic, economic and labour market needs</b>	<b>8</b>
<b>C. External efficiency: addressing social demands for VET and promoting social inclusion</b>	<b>13</b>
<b>D. Internal quality and efficiency of initial and continuing VET delivery</b>	<b>15</b>
<b>E. Governance and financing of VET</b>	<b>17</b>
<b>Annex 1: List of Key Indicators</b>	<b>19</b>
<b>Bibliography</b>	<b>32</b>

List of abbreviations

ALMMs	Active labour market measures
ALMPs	Active labour market policies
BDE	Bureau for Development of Education
CAE	Centre for Adult Education
EBRD	European Bank for Reconstruction and Development
ECTS	European Credit Transfer System
ESA	Employment Service Agency
ETF	European Training Foundation
EU	European Union
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
HRD	Human Resources Development
ICT	Information Communication Technologies
IMF	International Monetary Fund
LFS	Labour Force Survey
MoE	Ministry of Economy
MoES	Ministry of Education and Science
MKD	Macedonian Denar
MoLSP	Ministry of Labour and Social Policy
NCDIEL	National Centre for Development of Innovation and Entrepreneurship
NGOs	Non-Governmental Organisations
NQF	National Qualifications Framework
OECD	Organisation for Economic Cooperation and Development
OSCE	Organization for Security and Co-operation in Europe
PIRLS	Progress in International Reading Literacy Study
PISA	Programme for International Students Assessment
R&D	Research and Development
SEI	State Education Inspectorate
SEC	State Examination Centre
SMEs	Small and Medium Sized Enterprises
SSO	State Statistical Office
TIMSS	Trends in International Mathematics and Science Study
USD	United States dollar
USAID	United States Agency for International Development
VET	Vocational Education and Training
VET-2	Two-year vocational education and training
VET-3	Three-year vocational education and training
VET-4	Four-year vocational education and training
ZELS	Association of Units of Local Self-government

## Executive summary

### The process

Three successive processes of policy review and development (2011-2012) contributed to the Torino process report 2012.

This report is based on information and evidence gathered in the course of three policy review and development processes.

The first contributing element is the policy review launched by the Former Yugoslav Republic of Macedonia in 2012 to assess progress in line with the commitment signed by the Ministers responsible for VET of 33 states and the European Social Partners<sup>1</sup>, in Bruges on 7<sup>th</sup> December 2010, known as the Bruges Communiqué (2010). Led and coordinated by the Ministry of Education and Science (MoES), this policy review built on effective multi-stakeholder consultation and resulted in a rich stocktaking that highlighted achievements as well as recognised areas for substantial improvement.

The second contributing element is the process of development of the country's VET strategy for 2013 – 2020 that was started in 2012 by the country's Ministry of Education and Science and the European Training Foundation (it is forthcoming in 2013). At moment of writing of this report, the VET strategy undergoes government consultation, with approval expected within the first semester of 2013. The VET strategy and action plan have been developed by a team of national experts, with support of the ETF and counted on wide stakeholders' consultation, and advice by the inter-agency steering group led by the MoES.

Third, this Torino Process report is also based on information and evidence gathered from the *Review of Human Resources Development (HRD Review)* (ETF, 2013), drafted in 2011-2012 on request of the European Commission's Directorate General for Employment, Social Affairs and Inclusion, to serve as a reference for the revision of the Operational Programme HRD. For the writing of this HRD Review, ETF has depended on evidence and knowledge gathered with participation of numerous key government institutions, international organisations, non-governmental organisations, representatives from schools, and independent national and international experts active in the three policy areas: education and training; employment and social inclusion.

### OVERVIEW OF IMPORTANT INDICATORS

Progress underlines outstanding challenges in education policy

This report highlights that some positive trends in education and training, both in terms of indicators and new policy initiatives, have marked the period. However, major challenges will continue to require consistent action reinforced policy focus, notably in the areas: (i) access to early childhood education and care; (ii) quality of education and its expression in secondary education students' performance, as measured through external and international assessment studies; (iii) labour market relevance of vocational education and training and attractiveness of post-secondary and tertiary VET; (iv) outreach of education and training for the adult population, particularly for vulnerable categories.

The country shows mixed performance as regards the five **EU Education and Training 2020 benchmarks** (annex 1, Tables A3.5 and A3.5.1). There is visible progress in two benchmarks:

- a) early school-leaving, in which the 2012 country indicator (12.0%) surpassed the EU-27 average (12.9%), thanks to the reforms in 2008 that made upper-secondary education compulsory;
- b) the share of the population aged 30-34 with higher education: the country indicator increased by 10.3 percentage points between 2006 and 2012 and in 2012 reached 21.7% (against the EU-27 average of 35.5%).

However, in parallel, the country faces substantial challenges in areas where country indicators have been slow in progress: participation in early childhood education and care, in which the country indicator lags far behind the EU-27 average (29.6% against 92.4%, 2010); participation in adult learning; and youth basic skills (literacy, mathematics, science of 15 years olds).

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<sup>1</sup> EU-27, Iceland, Liechtenstein, Norway, Croatia, Turkey and the Former Yugoslav Republic of Macedonia; European Social Partners: ETUC, BUSINESSEUROPE, UEAPME, CEEP.

Results from international students' assessment studies (PIRLS, TIMSS and PISA) have been disappointing. Low performance demonstrated in the earlier participations (until 2006), has been confirmed by the poor results at TIMSS 2011 (8<sup>th</sup> grade students), the most recent study in which the country participated since adoption of the education reform programme (2005-2015).

Overall educational attainment of the working-age population (15-79 years) (Annex 1, Table A3.3) continued to improve thanks to the rapid growth of tertiary education attainment and decline of the proportion of lowest education level. However, in 2011 the share of working-age population with higher educational attainment<sup>2</sup> is still low (14.5%). Moreover, in 2011 there was still a significant weighting of people with incomplete primary and no education at all (10.2%), and 31.4% with only primary and lower secondary education. These low-skilled people are overly vulnerable to long-term unemployment and poverty. Adult education is therefore essential for the country's turnaround, both in terms of competitiveness and social inclusion.

## VET IN CONTEXT – ECONOMY AND POPULATION

The context for VET policy is highly challenging, notably due to complex labour market dynamics.

Following a moderate crisis-related decline in 2009, growth has resumed in 2010, albeit at a modest rate of 1.8%, and 3.0% in 2011. Projected growth in 2013 is 3.2%. The sector of services is the leading contributor to GDP (63.4% in 2011).

The demography (2,059 million population, estimate of 31.12.2011) faces the double challenge of complex inter-community / ethnic interactions and an aging trend.

Labour market indicators show improvements in the last 5 years, but the country continues to face a serious challenge, which, combined with low job creation and skills mismatch call for better articulation of all relevant policies, as acknowledged by the National Employment Strategy 2015.

The activity rate (15-64 years) stabilised since 2009 at approx. 64% (64,2% in 2011). The employment rate (15-64) increased slightly (to 43.9% in 2011), and the unemployment rate fell below 32% (31.4% in 2011, 31.0% in 2012).

Respective to the Europe 2020 employment headline indicator (target: 75%) the country has a long way to go as shows a gap of 20 percentage points separating the country employment rate (20-64) of 48.4% to the EU-27 average (68.2%) in 2012. This indicator was only 38.8% for females, which is far from the EU-27 average of 62.3% (females)<sup>3</sup> (Annex, Table A2.13).

Another major challenge is high youth unemployment, which continues to grow and reached 55.3% in 2011. The share of long-term unemployed (over 12 months) remains very high (82.6% in 2011).

In spite of high unemployment many job vacancies remain unfilled. Issues with relevance of skills and qualifications of the labour force are one of the causes of this dire situation. Employment rates of the population with higher education largely outperform the country average; and unemployment rates are substantially lower (Table A2.14 and A2.15). However advantage shows signs of moderation in 2011.

## TORINO PROCESS: PROGRESS AND CHALLENGES

The **vision** for VET has been revisited in 2012, through the process of development of the country's VET strategy (2013-2020). The strategic objectives are based on a lifelong learning perspective and its four pillars are inspired by the framework set in the Bruges Communiqué (2010): a) enhanced role of VET in social inclusion and cohesion, by improving the skills of youth and adults; b) reinforced attractiveness of VET, through diversity and flexibility of pathways and accent on key competences; c) emphasis on quality and relevance of VET, and stronger links with the labour market; d) improved governance, capacity and resources, including accent on social dialogue.

The **external efficiency of VET** in the Former Yugoslav Republic of Macedonia is mixed. In responding to **labour market needs**, available evidence shows a low degree of external efficiency, with unfavourable employment and unemployment rates associated with secondary education (general and vocational-technical), in comparison with higher education. Despite high levels of unemployment, modern enterprises often experience difficulties in recruiting personnel with the right skills, identifying

<sup>2</sup> Academic (12%) and vocational (2.5%) higher education

<sup>3</sup>[http://epp.eurostat.ec.europa.eu/tgm/refreshTableAction.do?tab=table&plugin=0&pcode=t2020\\_10&language=en](http://epp.eurostat.ec.europa.eu/tgm/refreshTableAction.do?tab=table&plugin=0&pcode=t2020_10&language=en)

inadequate levels of transversal and soft skills among job seekers as one of the key problems. Should this issue continue unaddressed, it will hamper the modernisation process and limit economic productivity in the country.

Data and analysis of emerging trends in jobs and skills demand, qualitative analysis of changing content of jobs and information on current and emerging mismatches are fundamental pillars for improving the alignment of education and training with the economy. Labour market information possesses some basic elements, based on employers' surveys by the State Employment Agency (ESA) and studies supported by international organisations. But the existing data and analysis contribute only partially to decisions related to skills development of the population.

The use by the country's VET system (at policy and providers' levels) of existing information on trends in demand for jobs and skills is insufficient and unsystematic. Apart from insufficiencies of technical and resource nature to deal with such information within the VET system, and the current limited coverage of the existing studies, there are only very limited possibilities allowed by the country's legal framework to adjust curricula and the supply of formal initial VET to respond to trends in the job market.

Recent analysis (ILO, 2012) confirms for the Former Yugoslav Republic of Macedonia that skills shortages co-exist with mismatch (over and under-education), and affect competitiveness in the branches of the food and tourism sectors. The EU Twinning project "Support to National Employment Policy" (report forthcoming) analysed skills-occupations (ISCED-ISCO) matching, and revealed the occurrence of non-negligible under-qualification, as well as over-qualification, with large variations by sector. There is substantial undersupply of labour with higher education across almost all sectors, in particular in health care; as well as in many service and production branches.

Enrolment in VET-four years of education has been increasingly biased towards two occupational areas: economy-law and trade, which absorbs over 25% of students; and health, with approx. 19% of students. Other occupational areas, such as mechanical and electrical engineering, have seen their cohorts steadily eroded.

This bias is also strong in tertiary education, with a remarkable rise of students' enrolment in higher education that has been disproportionately high in humanities and social sciences, fields that capture almost three quarters of all graduates of first cycle (bachelor) in the last decade. Graduations in medical, technical and biotechnical sciences have stagnated for years. This pro-humanities tendency may aggravate the existing jobs-skills mismatch.

The new draft concept of the eight-level NQF has high potential to improve progression and value of the qualifications inserted in the Macedonian Qualifications Framework (MQF). The draft concept explicitly includes qualifications acquired through formal and non-formal adult education pathways, alongside qualifications from formal education.

In addressing **social demands**, VET shows strengths and weaknesses. From the one hand, initial VET (technical education) is accessible for a large share of youth, since the country initial VET system is dominated by public school-based VET-four years of education (NQF level 4), in which are enrolled over half of all upper-secondary students. However, other levels of VET, in particular VET-three years (NQF level 3), post-secondary non-tertiary (NQF level 5) and vocational higher education (levels 5 and 6) absorb very low shares of students, due to insufficiencies in career information and guidance and in supply of modernised and relevant programmes and pathways.

Education policy recognises the importance of a lifelong learning approach in view of the country's socio-economic needs and the demographic challenges. In this context an adult learning law was adopted in 2008 and the Centre for Adult Education (CAE) was established. In 2012 CAE started implementation of a quality assurance approach for adult learning programmes and providers, and initiated courses in regions stricken by low adult literacy. However, access to training of adults and employees of companies remains limited.

**Quality** of education has been a central focus of policies and reforms, including in VET. In the country, 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. In the last years, large numbers of teachers have benefited of training in various areas of skills. However, results of external students' assessment show gaps. In international students' assessment studies, which provide a measure of quality in education, the country reveals no progress. The country's results in TIMSS 2011 (for 8<sup>th</sup> grade students) were disappointing and showed substantial gaps in the key areas of mathematics and science.

The country has yet to adopt VET-specific quality indicators, and introduce approaches to build a

culture of quality, such as peer learning / peer reviews among VET schools. Quality of learning outcomes in VET depends also on the role of practical training, which remains too limited in the curriculum of VET-four years of education. Every year at least three quarters of graduates from this predominant type of VET continue studies in higher education, often in fields of education unrelated with the qualification acquired in initial VET.

The **governance** setting in education and training features several specialised public agencies, under the leadership of the Ministry of Education and Science. Decentralisation towards the municipal level has mixed results, partly due to varying capacities and resources of municipalities. There is some institutional fragmentation, combined with a degree of overlaps in responsibility for certain areas, notably, for secondary VET (VET Centre) and adult education (CAE). Social partnership benefits of a legal base, but implementation remains weak and ineffective. The NQF has the potential to foster closer articulation of these departments and agencies. If effectively put in place, the planned Qualifications Council (Agency) can represent a much-needed bridge in the system.

The institutional setting for VET policy remains fragile despite the establishment of the VET Centre in 2007, and the adoption in 2010 of its strategy for institutional strengthening for the period 2010-2015. The institutional setting (MoES, BDE and VET Centre) allocates competences (decision making, advisory and executive) in a manner that limits the effective leadership by the VET Centre. Moreover, the current setting compromises the operational (budgetary and management) capacity of the VET Centre to lead and take action. Reflecting this state of affairs, the state budget for the VET Centre in the recent years has not accompanied the development needs of the sector.

## Major initiatives relevant for VET policy

The education and training sector in 2012 was marked by several exercises of policy review and strategic planning. As mentioned above, VET was one of the dynamic fields, through the review under the Bruges process, the development of the VET strategy (2013-2020), and the Torino process. In parallel, the strategy for development of entrepreneurial learning and the strategy for combating brain drain were initiated, and the Innovation Strategy was adopted in 2012.

The vision for VET has been revisited in 2012, throughout the process of development of the VET strategy (2013-2020). Approval of the strategy is imminent. The strategy builds on extensive consultation of stakeholders and all government agencies. The strategic objectives are based on a lifelong learning perspective and are aligned with the framework set in the Bruges Communiqué (2010), notably: impact on social inclusion and cohesion; reinforced attractiveness for youth and adults; quality and relevance through closer links with the economy and employment; improved governance and social dialogue.

The VET Law was amended in 2013 to reflect changes in the procedure of adoption of occupational standards, and in students' assessment. The national legislation (Laws on Primary and Secondary Education) was amended in 2012 to incorporate mandatory external students' assessment for primary and secondary education.

Higher education has seen numerous legislative modifications, and policy initiatives, such as the establishment of a National Council for Higher Education, Science, Innovation and Technology – as expert advisory body of the Government; launch of the database on quality indicators for higher education; establishment of at least one career guidance centre per university; signature of cooperation agreements with top world universities; defined duration of studies in the regulated professions.

The draft policy concept of the comprehensive National Qualifications Framework (NQF), finalised in 2013, covers all levels not included in the qualifications framework for higher education (adopted in 2010), includes qualifications obtained via formal and non-formal pathways, and specifies quality assurance aspects and institutional roles. This is a timely development, as the country became member of the Advisory Group EQF from January 2013, and is expected to prepare for referencing to the European Qualifications Framework, a long process requiring leadership and expert support.

Pressured to enhance quality and labour market relevance of the curriculum, and after years of inaction, the VET Centre engaged in preparation of reforms of VET-three years of education, which is the pathway with closer link with employment. With EU support<sup>4</sup> (Twinning project, 2012), 51 occupational standards for 13 professional fields; 25 standards of qualification and 13 new curricula

<sup>4</sup> EU Twinning project "Support to the modernisation of the education and training system", with the VET Centre and the Slovenian Vocational Education and Training Centre (CPI).



were developed. The project's contribution to capacity development included VET teacher training and methodology packages for design of standards and curriculum.

The Ministry of Education and Science reached preliminary agreement with OECD regarding participation in PISA-2015, the important international students' assessment from which the country has been absent since 2000.

## A. Vision for VET system development

The challenges reside not only in the labour market conditions and low job creation, or in insufficient engagement of the industry in VET at all levels. Part of the problem lies with the inefficient functioning and interactions of the relevant decision-making and executive institutions. This influences the effectiveness of reforms in VET at macro level, and the logic of individual choices of careers and study paths at micro level.

The current system of initial VET is predominantly school and theory-based, has weak links with the context of work and lacks the capability to respond to the demands of a restructured economy that requires employees with new types of skills and competences (soft) that traditional learning packages and approaches have hardly been developing.

The **vision** for VET has been revisited in 2012, throughout the process of development of the VET sector strategy (2013-2020). The vision is enshrined in the theme of the VET strategy paper: ***“Better skills for a better tomorrow”***.

The development of this VET sector strategy promises renewed impetus for the VET sector, based on reinforced collaboration with social partners, but, if it is to meet the expectations, VET policy must concentrate on deploying more and better practical learning in cooperation with enterprises, on improving quality of VET programmes and qualifications and ensuring flexible access for the various categories of learners.

The VET strategy document is a comprehensive and long document, accompanied by a Action Plan and cost estimate, that details activities for the whole period from 2013 to 2020.

The formulation of the vision for VET 2020 could be improved by building on clear scenarios for socio-economic development and the related skills anticipation – an exercise the country has still to undertake and communicate throughout its policies.

The final draft of the VET strategy (2013-2020) builds on four pillars, formulated below, inspired in the strategic objectives of the Bruges Communiqué (2010). The strategy acknowledges social and economic challenges of a more competitive skills mix of the labour force, with a strong emphasis on lifelong learning perspective. The future VET system should be more flexible and open to learning innovation and to social partnership, responsive to economic needs of the enterprises as well as to social needs of individuals and communities, and be based on improved management, evidence and accountability.

- Strengthening the role of vocational education and training in achieving social cohesion in the country and preventing social exclusion of youth and adults which is consequence of low qualifications and skills for employment and labour market participation; improvement of quality of life in general,
- Strengthening the attractiveness of vocational education and training through raising public awareness on the opportunities it offers, building diverse and flexible pathways for learning, improving professional guidance in a lifelong learning context, and developing key competences for lifelong learning,
- Improving the quality of vocational education and training through establishing a system for quality assurance and application of a new pedagogy, and its relevance to the needs of the labour market, as a guarantee for competitiveness,
- Strengthening and innovating the mechanisms for good governance, utilisation of resources, the capacities and accountability in the future VET system and the social dialogue.

The adoption of the VET strategy and Action Plan by the Parliament is expected to contribute to better mid-term expenditure planning for VET development. However the scale and complexity of the actions planned for the seven years of the strategy will require an approach to implementation that cannot be

complacent, or “business as usual”. Apart from steering from the top political level, and the need for a strongly reinforced capacity of the VET Centre, the role of local and municipal bodies will be a necessary pillar to ensure that the planned reforms and actions reach the population.

Summing-up, the following are the key messages related to the implementation of the VET strategy and its contribution to the vision for VET. There is a need for:

- Improved skills needs anticipation and use for steering of VET and skills policy;
- Promotion of the involvement of dynamic partnerships of education and economic actors at local and municipal levels to move towards action, innovation and ownership for outcomes, and reinforce the relevance of practical learning;
- Implementation, funding and monitoring of the VET strategy 2013-2020 based on evidence and coordination with other relevant strategies, notably in adult learning, entrepreneurial learning and employment;
- Systematic knowledge management and sharing through open resources of outcomes and good practices.

## **B. External efficiency: addressing demographic, economic and labour market needs**

### ***Challenges***

#### Reforms: from pilots to system change

VET development has benefited from domestic and international support, but the overall system performance is disconnected from many of the novelties developed through such international cooperation. This confirms the well-known problems coined as: “lack of sustainability”, “lack of ownership”, “fragmented technical inputs not absorbed by the system” or “lack of coordinated actions to reform the system”. To blame are the involved sides (international and national) and the short-run nature of the political cycle, incompatible with the long-run nature and continuity that underlies skills development and education policies. The cost of failed experiments is huge as generations of youngsters fail to benefit from the expected outcomes of such investment.

As a result, the performance of the VET system is considered generally disappointing. A recent example relates to the difficulties in launching the modernised VET curriculum (VET-3 years of education) which feature a larger weight of practical learning. Developed with EU support in 2011-2012, the new curricula face a difficult adoption process, which, if not timely concluded might slow down the preparation to implementation of these new programmes in the coming school year. In technical terms the project reached the planned outputs; but the other – non-technical - deciding factors need to be better embedded in this interaction of the *new* and *old*.

#### Labour market information and intelligence – evidence for VET policy

Data and analysis of emerging trends in jobs and skills demand, qualitative analysis of changing content of jobs and information on current and emerging mismatches are fundamental pillars for improving the alignment of education and training with the economy. But the use by the VET system (policy and providers’ levels) of information on trends in jobs and skills is insufficient and unsystematic.

Existing resources and studies are as yet sporadic and partial in their coverage of economic sectors and regions, dependent as they are mostly from donors’ projects. The exception is the annual employers’ survey conducted by the Employment State Agency.

Skills needs analysis reports published on an annual basis by ESA show only a partial picture of the market. They are mainly concentrated on small and medium-sized enterprises and tend to focus on lower-medium level of skills) and are by nature, oriented to the short-term. Other skills anticipation studies are available, namely with a sectoral approach, such as the ICT study, supported by GIZ; and study in skills for food processing and tourism, initiated by the ILO (ILO, 2012). But the deciding actors in the VET sector are not enabled to translate such information and analysis into relevant policy decisions, and curriculum reforms – due to both technical capacity and procedural (legal) reasons.

Apart from long-term forecasting at national level (in development at MLSP, with EU support) providing aggregate information with sector and occupational relevance, it is necessary to develop more continuous updates on demand and supply of skills at local and regional levels, with succinct reporting tailored for VET provision and other users.

Schools and municipalities do not use reliable tools to monitor transition of learners / graduates to the labour market and other opportunities of career development.

Career guidance services suffer from the absence of good knowledge of skills demand trends and the intrinsic employment / career value of the occupations and qualifications. Moreover, the most disseminated career guidance initiatives are not the most effective, limited as they are with a supply of VET perspective (e.g. information events on existing courses in VET schools to attract students), or with not yet consistently developed donors initiatives linked with support – temporary and partial - to new career centres in VET schools.

#### The socio-economic and labour market context

Persisting low labour market participation, particularly of women, combined with very high unemployment set a vast challenge for a VET policy, which is deprived of the needed resources and engagement from the industry.

The **population** (2,059 million, estimate of 31.12.2011) features various challenges, notably, complex inter-community / ethnic interactions and an aging trend. In 2011, the youngest group (0-14) represented 17.3% of the population, and the group over 65 - 11.8%.

Following a moderate crisis-related decline in 2009, growth has resumed in 2010, albeit at a modest rate of 1.8%, and 3.0% in 2011. Projected growth in 2013 is 3.2%.

Agriculture contributes with 11% to GDP, but is a big employer (about 19% of employed). Around half of the employed are in the services sector, which produces 63.4% of GDP (2011). The industrial sector absorbs 30% of the employed and contributes 27.5% to GDP (2011). (Annex, Tables A2.1 and A2.2).

The informal economy and informal forms of employment are of substantial size. Policies need to consistently promote ways to tap the potential of this part of the economy and labour resources.

Labour market indicators show improvements in the last 5 years, but the country continues to face a serious challenges, which, combined with low job creation and skills mismatch call for a better articulation of all relevant policies, as acknowledged by the National Employment Strategy 2015.

The activity rate (15-64 years) stabilised since 2009 at approx. 64% (64,2% in 2011). The employment rate (15-64) increased slightly (to 43.9% in 2011), and the unemployment rate fell below 32% (31.4% in 2011, 31.0% in 2012).

Respective to the Europe 2020 employment headline indicator (target: 75%) the country has a long way to go as shows the gap of 20 percentage points separating the country employment rate (20-64) of 48.4% the EU-27 average (68.2%) in 2012. This indicator was only 38.8% for females, which is far from the EU-27 average of 62.3% (females)<sup>5</sup> (Annex, Table A2.13).

Another major challenge is high youth unemployment, which continues to grow and reached 55.3% in 2011. The share of long-term unemployed (over 12 months) remains very high (82.6% in 2011).

In spite of high unemployment many job vacancies remain unfilled. Issues with relevance of skills and qualifications of the labour force are one of the causes of this dire situation. Employment and unemployment rates of the population with higher education largely outperform the country average (Table A2.14 and A2.15), but this comparative advantage shows signs of moderation in 2011.

#### Mismatch

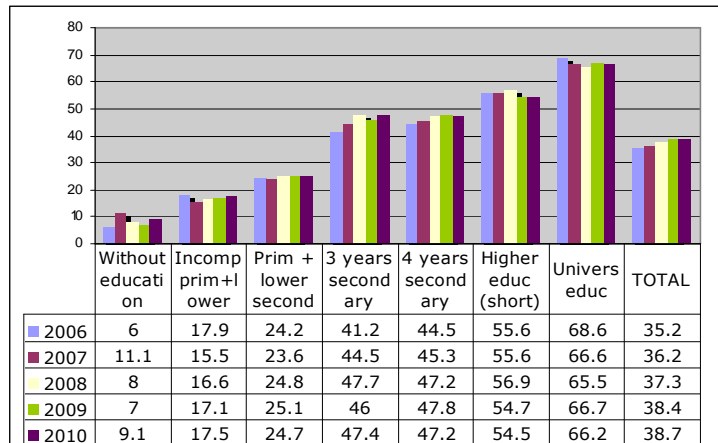
Despite high levels of unemployment, modern enterprises often experience difficulties in recruiting personnel with the right skills, identifying inadequate levels of transversal and soft skills among job seekers as one of the key problems. Should this issue continue unaddressed, it will hamper the modernisation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

Analysis of the **external efficiency of VET** brings up high and persisting challenges. In responding to **labour market needs**, available labour market indicators (SSO) show a low degree of external efficiency, with unfavourable employment and unemployment rates associated with secondary education (general and vocational-technical), in comparison with higher education.

<sup>5</sup>[http://epp.eurostat.ec.europa.eu/tgm/refreshTableAction.do?tab=table&plugin=0&pcode=t2020\\_10&language=en](http://epp.eurostat.ec.europa.eu/tgm/refreshTableAction.do?tab=table&plugin=0&pcode=t2020_10&language=en)

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 1 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%).

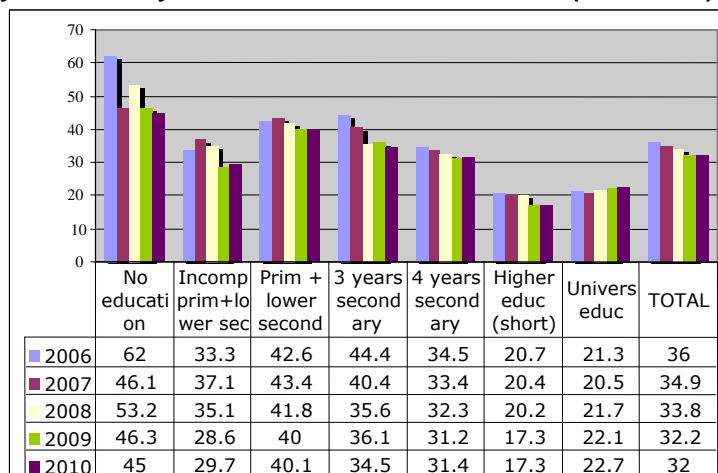
**Figure 1: Employment rate by level of educational attainment (as per country structure of education) – (2006-2010)**



Source: SSO, LFS. Graph: ETF

Likewise, Figure 2 shows unemployment rates associated with this level of education in 2009 were lower than the country average by a sizeable 29%.

**Figure 2: Unemployment rate by level of education attainment - (2006-2010)**



Source: SSO, LFS. Graph: ETF

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.

High concentration of VET students in few fields of study reflects, amongst others, limitations in career information and guidance. Enrolment in VET-four years of education has been increasingly biased towards two occupational areas: economy-law and trade, which absorbs over 25% of students; and health, with approx. 19% of students. Other occupational areas, such as mechanical and electrical engineering, have seen their cohorts steadily eroded.

The visible rise of students' enrolment in higher education in the last decade has been disproportionately high in humanities and social sciences, fields that capture almost three quarters of all graduates of first cycle (bachelor) in the last decade. Graduations in medical, technical and

biotechnical sciences have stagnated for years. This pro-humanities tendency may aggravate the existing jobs-skills mismatch.

Recent analysis (ILO, 2012) confirms that skills shortages co-exist with mismatch (over and under-education), and affect competitiveness in the branches of the food and tourism sectors. The EU Twinning project “Support to National Employment Policy” (report forthcoming) analysed skills-occupations (ISCED-ISCO) matching, and discussed the conclusions with stakeholders in 2013. This analysis indicates the occurrence of non-negligible under-qualification, as well as over-qualification, with large variations by sector; and points to a substantial undersupply of labour with higher education across almost all sectors, in particular in health care; as well as in many service and production branches. The current level of under-qualification is highest in the sectors of healthcare, trade and electricity gas and water supply. In agriculture over-qualification is significant. Inversely, hotels and restaurants, transport, and manufacturing are among the sectors showing highest matching of skills to occupations.

### ***Main policy initiatives***

In 2010-2012 the stakeholders continuously developed conceptual and analytical work, leading to the main highlight: the VET strategy (2013-2020), mentioned in Section A of this report.

Other developments, supported by international partners and the government have addressed needs in the areas of VET curriculum, the qualifications framework and social partnership.

Pressured to enhance quality and labour market relevance of the curriculum, and after years of inaction, VET Centre engaged in the preparation to a meaningful reform of programmes in VET-three years of education, which is the pathway with closer link with employment. With EU support<sup>6</sup> (Twinning, 2012) 51 occupational standards for 13 professional fields; 25 standards of qualification and 13 new curricula were developed. The 13 occupational fields are: agriculture-veterinary, forestry-wood processing, mining-geology and metallurgy, mechanical engineering, chemistry-technology, textile-leather industry, graphics, construction-geodesy, transport, catering and tourism, personal services and economy-law and trade. Examples of the occupations for which new curricula were developed include: mining machine operator, printing machinist, meat processor, car-mechanic, waiter, and sales person.

The newly designed curriculum is oriented to learning outcomes, proposes approx. 30% of workload for practical learning in work context, and room for adjustment (20% of content) to school and local context and needs. This curriculum is competence-based, i.e, professional competences from the occupational standards are translated in the curriculum; the catalogue of knowledge includes key and professional competences, achieved through the learning outcomes; learning outcomes is the basis for students’ assessment. The project’s contribution to capacity development included VET teacher training and methodology packages for design of standards and curriculum. However, as mentioned in this report, implementation of this new curriculum faces difficulties.

A newly designed subject – “Innovation and entrepreneurship” – was introduced in upper-secondary curriculum (from academic year 2012/2013) and in 8th and 9th grade of lower secondary education (from 2013/2014).

The new draft concept of the comprehensive NQF (draft of January 2013) has high potential to improve progression and value of the qualifications inserted in the NQF. The draft concept explicitly includes qualifications acquired through formal and non-formal adult education pathways, alongside qualifications from formal education – from levels 1 to 8.

The VET Centre signed a number of memoranda of cooperation with social partner organisations, in particular with chambers, business confederations, trade unions, and association of units of local self-government. These memoranda aim to provide systematic grounding and dynamism to cooperation on VET policy and programmes, namely, in ensuring better conditions for practical learning.

To improve the organisation of practical learning, VET Centre designed, with USAID support, an online registry of companies that fulfil a number of quality criteria to host learners for practical training. This online registry, which was piloted in 2012, aims to open wider access of VET schools to reliable companies.

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<sup>6</sup> EU Twinning project “Support to the modernisation of the education and training system”, with the VET Centre and the Slovenian Vocational Education and Training Centre (CPI).

### **Capacity of the formal VET system**

Most of the capacity of initial VET provision is based on public schools (Ministry of Education and Science and European Training Foundation, 2013). The supply of occupational profiles is pegged to schools' characteristics in terms of infrastructures and traditions, which change slowly. This somewhat inflexible offer of VET profiles partly predetermines students' choices, linked as they are with the area of residence and the functioning VET schools. Some say that students do not have much alternative, they tend to simply enrol in the accessible VET school.

Secondary VET is part of secondary education school and has the following levels:

- Technical VET: VET-4 years
- VET-3 years
- VET-2 years

Secondary education is carried out in 99 public (10 state schools, 21 schools of the City of Skopje, and 68 municipal schools) and 13 private schools.<sup>7</sup>

According to the type of secondary education and curricula delivered in the public schools, 16 are general education schools and 40 vocational schools, whereas 34 schools offer both general and vocational education; 4 are vocational schools for students with special education needs and 5 are art schools.<sup>8</sup>

The number of secondary vocational schools by occupational areas is as follows<sup>9</sup>: agriculture-veterinary 11, forestry-wood processing 8, geology-mining and metallurgy 7, machine engineering 25, electro-technical 20, chemistry-technology 15, textile-leather fabrication 17, graphic 4, personal services 9, construction-geodetics 8, traffic 11, catering-tourism 12, economy-law and trade 17, medical 16, sports general school 3, and art education 6.<sup>10</sup>

13 private secondary schools operate in the country, of which 6 offer vocational education (in the fields of economy-law and trade, medical, personal services, traffic and catering-tourism occupational areas).<sup>11</sup>

The important question is whether these profiles and levels of qualification meet current demand and are whether the VET system is sufficiently open to adjust and diversify its offer to meet both needs of the enterprises and the lifelong learning possibilities of employees and job seekers. The reply is given by existing evidence from labour market statistics. As well as by the fact that current rules and procedures for introduction of new occupational profiles and to modify and modernise existing courses and programmes are considered highly centralised and lengthy; and discourage innovation at VET providers level on this crucial question. Finally, it is practically certain that without more practical training in the work context, VET learners cannot be approximately job fit.

As said above, VET-4 has the dominating share of enrolments in upper-secondary education (over 58% in the last years), in spite of a declining trend since 2000 (Annex, Table A3.6).

A complementary perspective is given in Table 1, showing that vocational education and training is unattractive at all levels after secondary education. This could be a confirmation of the previously stated hypothesis that the massive students' option for VET-4 is largely predetermined by the existing supply (school at place of residence), rather than by more or less informed career option.

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<sup>7</sup> According to: Public call for enrolment of students in public secondary schools for the school year 2012/2013, MoES

<sup>8</sup> Ibid

<sup>9</sup> According to: Public call for enrolment of students in public secondary schools for the school year 2012/2013, MoES

<sup>10</sup> Number of schools indicating where respective occupational areas/curricula are taught; one school can offer training in several occupation areas.

<sup>11</sup> SSO of the RM, Primary and secondary schools at the beginning of the school year 2011/2012 , 2.4.12.04/718

**Table 1: Overview of students in vocational education and training - 2011**

Levels	Types of VET	Number of students	%
Secondary vocational education	Vocational skilling	163	0.29
	3-year secondary VET	5058	8.88
	4-year secondary VET	48882	85.85
	special secondary schools	287	0.50
Post-secondary vocational education	Specialisation	449	0.79
	Master exam	0	0
Higher vocational education <sup>12</sup>	Higher vocational schools	2102	3.69
<b>Total</b>		<b>56941</b>	<b>100,00</b>

**Source:** SSO of the RM, Primary and secondary schools at the end of the school year 2010/2011. Statistical Review No. 2.4.12.06/720, Skopje, June 2012

## C. External efficiency: addressing social demands for VET and promoting social inclusion

In 2011 the share of poor people decreased to 30.4% (Annex A.4.1). According to the State Statistical Office, **poverty** is associated with the size of the household, status of unemployment and **low educational levels**. 48.5% of the poor people live in households with 5 and more members. The poverty rate for the unemployed is 40.7%, i.e. 46.0% of all poor people are unemployed. 54.6% of the poor live in households where the head of the household has no, or at most primary education.

The country's rank in the gender gap index declined in 2011 and 2012 (Annex, Table A4.1. and A4.4.1).

The gender gap has improved in several education and labour market indicators, in particular (i) women outperform in tertiary education attainment (30-34 years) and largely in higher education enrolment; (ii) similarly, girls have higher enrolment rates in upper-secondary education; (iii) activity and employment rates have been on the rise for women in 2010 and 2011, unlike for men.

However, in many important indicators, the gender gap is unfavourable for women: (i) activity and employment rates for men are much higher (by over 15 percentage points); (ii) enrolment rates in lower education levels; (iii) share of the working age population (15-79) with lower education levels (at most lower secondary). Male students continue to predominate in secondary vocational education.

In addressing **social demands**, VET features both strengths and weaknesses.

On the side of the strengths, 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 2007/2008 academic year the country increased the duration of lower secondary education to a statutory minimum of nine years, and upper-secondary education (2 years) was made compulsory the following year. These policies do contribute to universal access of the whole population to a common stock of knowledge and competences enshrined in general education, which is positive for lifelong learning of the individuals (without dead-ends), and for social cohesion.

In addition, enrolment in higher education grew by approximately 77% in the 2000-2008 period, 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. A large proportion of VET-4 graduates underwent the State Matura examination that provides access to higher education (ETF, 2010b). The share of VET-4 graduates completing the Matura was 75.8% and 65.4.3%, in the 2007/2008 and 2008/2009 school years respectively.

Moreover, "technical secondary education" is accessible for a large share of youth, since the country initial VET system is dominated by public VET-four years of education (NQF level 4), in which are enrolled over half of all upper-secondary students (and 86% of all secondary VET students). This is

<sup>12</sup> The part on higher vocational education lacks students enrolled in vocational study programmes at universities who are not among the students of the vocational higher schools.

likewise positive to build that meaningful stock of population with medium level qualifications, allowing them to be immediately employed, as well as to pursue education and training in diverse formats and pathways, from post-secondary flexible specialisation courses, to tertiary vocational and academic studies.

But the challenges are complex, linked as they are with the predominant societal and political understanding of the purpose of initial VET, reflected in VET structures and legislation. The current VET system is only weakly facilitating transition to employment. And this is a serious challenge.

The problem lies with the important gaps between VET-4 (school-based and essentially theoretical) and employment from one side; and, from the other side, with the current vacuum in terms of flexible and meaningful post-secondary training granting meaningful professional qualifications, and making them more job-fit, in closer articulation with enterprises. Learners have no alternative but to go from school-based and rather inflexible VET-4, poorly connected with practical learning – to academic studies in tertiary education. Finally, students' career choices in higher education lead three quarters of them into social sciences and humanities, while the technical and other sciences that would stimulate more innovation and entrepreneurship continue to lose ground.

This is illustrated by the fact that other levels of VET, in particular VET-three years (NQF level 3), post-secondary non-tertiary (NQF level 5) and vocational higher education (levels 5 and 6) absorb very low shares of students, due to insufficiencies in career information and guidance and in supply of modernised and relevant programmes and pathways. The share of learners in the VET pathways that are more oriented to employment is very low; moreover reforms of these pathways have only started.

As the weight of low education (no education and lower secondary) remains significant, and statistics show that low skilled people are much more vulnerable to long-term unemployment, and tend to exclusion from developments in technology and economy, the country's policies need to address more specifically the needs of this part of the population. This low-education vulnerability is particularly accentuated among women and ethnic minorities, calling for better-targeted policies.

This inefficient skills distribution calls for diversification of the VET offer, in terms of pathways, duration, flexibility, and combination of formal and non-formal forms of VET for all population groups. However, VET policy continues to focus mostly on formal secondary VET, especially, on VET-4.

Education policy recognises the importance of a lifelong learning approach in view of the country's socio-economic needs and the demographic challenges. In this context an adult learning law was adopted in 2008 and the Centre for Adult Education (CAE) was established, and initiated courses in regions stricken by low adult literacy. However, access to training of adults (employees in companies as well as unemployed) remains limited.

The implemented active labour market measures (ALMMs), coordinated by the Employment State Agency (ESA), do include training on demanded skills and occupations, but their outreach is low, due to declining budgets, as well as insufficiencies in the adjustment of such training programmes to needs and profiles of the target groups. In 2010-2011 ALMMs benefited of budgets corresponding to 0.1% of GDP and a limited outreach (approx. 2% of the number of registered unemployed). (Annex, Tables A2.11 and A2.12).

In 2012 the area of gender equality and non-discrimination received a number of new legal and policy documents, in particular: (i) the Strategy for Gender Equality (2013-2020) and the National Action Plan (2013-2016); (ii) the National Strategy (2012-2015) and the Action Plan (2012) for equality and non-discrimination on the grounds of ethnic origin, age, disability and sex; (iii) the Strategy (2012-2017) and the Action Plan (2013) for implementation of gender responsive budgeting.

The Conditional cash transfers (CCT) project (with World Bank support) aims to contribute to poverty reduction and enhancement of human capital, thereby reducing the inter-generational transmission of poverty over the long run. The November 2012 assessment of progress considers high the likelihood to achieve the development objectives, despite budget constraints. The impact evaluation for education planned for October 2012 was postponed due to delays in funding from the Ministry of Finance. The attendance rates of children ages 15-18 in CCT beneficiary households was 96.42%, in 2012, therefore surpassed the required minimum (85%).



## **D. Internal quality and efficiency of initial and continuing VET delivery**

**Quality** of education has been a central focus of policies and reforms, including the VET system. In the country, 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. In the last years, large numbers of teachers have benefited of training in various areas of skills.

In 2012, the CAE started implementation of a quality assurance approach for adult learning programmes and providers.

The draft NQF concept includes a number of quality assurance aspects, notably related to verification of programmes and qualifications included in the NQF, and roles of the various institutions. And in the VET strategy (2013-2020) the issues of quality and relevance are addressed in one of the four strategic pillars.

A meaningful set of quality indicators for VET needs to be designed and used widely across the system, at providers, and policy levels. The EU initiatives in VET quality assurance (EQAVET) offer an immense knowledge base as well as an online tool that could be a useful starting point for developments in the country.

### ***Students' assessment***

Results of external students' assessment show substantial challenges. In international students' assessment studies, which provide a measure of quality in education, the country has revealed continuing decline in performance. The country's results in TIMSS 2011 (for 8<sup>th</sup> grade students) were very disappointing, as they showed the continuation of declining performance, reflecting substantial gaps in the key areas of mathematics and science.

The State Examinations Centre (SEC) was established as an independent body to develop student assessment. The Centre launched 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.

SEC pursued the implementation of the State Matura from 2008 with the support of a World Bank project. The results produced 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. The evidence provided by State Matura outcomes clearly shows the area of mathematics is experiencing persisting weaknesses worthy of specific attention from education authorities and schools.

### ***Quality in VET: issues related to practical learning***

The country has not yet adopted a set of initial VET-specific quality indicators, or tools such as peer learning / peer reviews among VET schools. Quality of learning outcomes in VET depends also on the role of practical training, but its weight remains too limited in the curriculum of VET-four years of education. Every year at least three quarters of graduates from this predominant type of VET continue studies in higher education, often in fields of education unrelated with the qualification acquired in initial VET.

Curricula for VET-4 programmes (which absorb over 90% of all secondary VET students) follow a standardised structure, valid for all 42 educational profiles within the aggregated 14 occupational

groups<sup>13</sup>. 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 MoES in 2007 (VET Centre, 2007). The VET Centre website contains no additional relevant details of education plans or programmes relating to VET-3 and VET-2.

Close study of the Education Plans shows the primary goal of VET-4 programmes is not to train learners for employment<sup>14</sup>. The curriculum delivered is subject-based, theory-rich and practise-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 competences<sup>15</sup> 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 review three types of practise-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 shows that nearly 70% of the approximately 55,000 VET students took part in practical training, while only around 5% participated in professional practise.

**Table 2: Participation of VET students in practise-based learning**

	School year 2010/2011	School year 2011/2012
<b>1. Practical training (labs)</b>	40,466	39,787
Of which: VET-4 students	37,039	36,369
<b>2. Summer practise</b>	10,839	10,847
Of which: VET-4 students	8,891	9,066
<b>3. Professional practise</b>	3,005	2,366
Of which: VET-4 students	2,503	2,877

Source: MoES

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 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.

Reformed qualification standards of VET-3, carried out in 2012 with support of the EU Twinning project (Twinning, 2012), were designed with more systematic consultation with employers and VET Centre advisors took active part in the process.

<sup>13</sup> 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; medical.

<sup>14</sup> 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.

<sup>15</sup> All of which are listed in the framework of key competences for lifelong learning (European Parliament, 2006).

## **E. Governance and financing of VET**

**Governance in VET** will require further efforts to improve effectiveness of the institutional setting, and of social partnership and dialogue at all levels. The institutional setting in education and training includes several specialised public agencies, under the leadership of the MoES.

Decentralisation towards the municipal level has had mixed results, performance varies largely, and often depends on existing local / municipal capacities. Moreover, there is some institutional fragmentation, combined with a degree of overlaps in responsibility for certain areas, notably, for secondary VET (between MoES and VET Centre) and adult education (CAE and VET centre).

There is ample ground for potential interaction between the VET Centre and the Centre for Adult Education (CAE) 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 operates on a five-year organisational development strategy for the 2010-2015 period, articulated around the six priorities of staff development, processes, quality assurance, communication, partnership and international cooperation. Interviews held with VET Centre advisors in 2012 appeared to show limited progress in the implementation of these activities.

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 implementation and monitoring challenges of the new VET strategy (2013-2020).

Social partnership benefits of an acceptable legal base, including a number of Memoranda of Cooperation signed between the VET Centre and chambers, associations and other partners. However, implementation remains ineffective, due to insufficient communication towards users in the business community, and other social partners.

The two main social partnership councils (VET and Adult Education) tried to develop some pertinent activity, but they lack support, including consistent membership representing many of the involved state bodies.

The NQF has the potential to foster closer articulation of these departments and agencies. If effectively put in place, the planned Qualifications Council (Agency) can represent a much-needed bridge in the system.

Since the country engaged in processes of reform in education and labour market, the need for further analysis and evaluation shows no sign of abating.

### ***Financing***

The consultation process for the VET Strategy identified widespread dissatisfaction with the system of financing of VET, most often focused on the lack of resources for development, equipment and consumables at VET schools.

In 2012, although increased in absolute figures, the budget of Ministry of Education and Science reached its lower level as share of GDP (4.44%) since 2009 (when it was 4.94%).

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.

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. 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.

The CAE has also 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.

The analysis underlying the VET strategy (2013-2020) (Ministry of Education and Science and ETF, 2013) identifies financing of VET as one of the most important concerns for all stakeholders. The current public VET financing system, merged with financing of general education, does not allow estimation of per student cost of initial VET (nationally and by sectors), which compromises informed decisions regarding changes regarding shifts in supply of VET various types of courses.

The municipalities receive block grants from the MoES, which are in general used for salaries, student transportation and heating costs, while development purposes are marginalised. The schools themselves cover part of the operational costs, from revenues of service provision. Municipalities are likewise dissatisfied with this methodology and are for changes likely to better respond to specific features of VET institutions, the local context, and the diverse ranges of cost of training.

In addition to state funding, VET receives additional funds through projects, most often implemented by international donors, and special funds from different Government ministries. Some schools organise income-generating activities, such as training for outside users, provision of diverse services and production and sale of products. Unfortunately, such practices are rare.

## Annex 1: List of Key Indicators

### FORMER YUGOSLAV REPUBLIC OF MACEDONIA State of play: 15.04.13

#### 1. POPULATION

**Table A1.1. Total population (million inhabitants)**

	2007	2008	2009	2010	2011
<b>Total</b>	2.05	2.05	2.06	2.06	2.06

Source: The World Bank, 2013

**Table A1.2. Annual population growth (%)**

	2007	2008	2009	2010	2011
<b>Total</b>	0.24	0.22	0.21	0.18	0.16

Source: The World Bank, 2013

**Table A1.3. Population by age groups (%)**

	2010	2011
<b>0-14</b>	17.3	17.4
<b>15-24</b>	14.9	15.0
<b>25-54</b>	43.3	44.1
<b>55-64</b>	11.0	11.7
<b>65+</b>	13.6	11.8

Source: (2010) ETF calculation on UNPD, 2013; (2011) ETF calculation on SSO, 2012b.

**Table A1.4. Dependency rates**

	2007	2008	2009	2010	2011
<b>Total (0-14 and 65+)</b>	43.4	42.7	42.2	41.7	41.4
<b>Young (0-14)</b>	27.1	26.3	25.6	25.0	24.4
<b>Old (65+)</b>	16.3	16.4	16.6	16.7	16.9

Source: The World Bank, 2013

## 2. LABOUR MARKET

**Table A2.1. Employed (15-79) by main sectors (NACE REV 1.1)**

	2007	2008	2009	2010	2011
<b>Total</b>	100	100	100	100	100
<b>Agriculture</b>	18.3	19.7	18.5	19.1	18.7
<b>Industry</b>	31.3	31.3	29.8	29.1	30.0
<b>Services</b>	50.4	49.1	51.7	51.8	51.3

Source: ETF calculation on SSO, 2012a, 2011a, 2010a, 2009a

**Table A2.2. GDP by main sectors (Value added, % of GDP)**

	2007	2008	2009	2010	2011
<b>Total</b>	100	100	100	100	100
<b>Agriculture</b>	10.6	11.6	11.2	11.3	11.1
<b>Industry</b>	31.0	29.8	27.5	27.8	27.5
<b>Services</b>	58.5	58.7	61.4	60.9	61.4

Source: The World Bank, 2013

**Table A2.3. Activity rates by gender (15-64), %**

	2007	2008	2009	2010	2011
<b>Total</b>	62.8	63.5	64.0	64.2	64.2
<b>Men</b>	74.8	76.6	77.6	77.7	76.8
<b>Women</b>	50.4	50.2	50.0	50.4	51.2

Source: Eurostat, 2013

**Table A2.4. Employment rates by gender (15-64), %**

	2007	2008	2009	2010	2011
<b>Total</b>	40.7	41.9	43.3	43.5	43.9
<b>Men</b>	48.8	50.7	52.8	52.8	52.3
<b>Women</b>	32.3	32.9	33.5	34.0	35.3

Source: Eurostat, 2013

**Table A2.5. Employment by education (15-64), %**

	2007	2008	2009	2010	2011
<b>Total</b>	100	100	100	100	100
<b>ISCED 0-2</b>	25.2	26.6	25.4	24.1	23.7
<b>ISCED 3-4</b>	54.8	55.0	54.3	54.3	52.9
<b>ISCED 5-6</b>	20.0	18.4	20.3	21.7	23.4

Source: ETF calculation on Eurostat, 2013

**Table A2.6 Distribution of employment (15-79) by status and by gender (%), 2011**

	Total	Male	Female
<b>Total</b>	100	100	100
<b>Employee</b>	71.8	69.2	75.7
<b>Employer</b>	5.7	7.1	3.6
<b>Self employed</b>	13.0	17.6	5.9
<b>Unpaid family worker</b>	9.6	6.1	14.9

Sources: SSO, 2012a

**Table A2.7. Unemployment rates by gender (15-64), %**

	2007	2008	2009	2010	2011
<b>Total</b>	35.2	34.0	32.3	32.2	31.4
<b>Men</b>	34.8	33.7	32.0	32.1	31.9
<b>Women</b>	35.8	34.3	32.9	32.5	31.0

Source: Eurostat, 2013

**Table A2.8. Youth unemployment rates by gender (15-24), %**

	2007	2008	2009	2010	2011
<b>Total</b>	57.7	56.4	55.1	53.7	55.3
<b>Men</b>	57.4	55.7	52.7	53.9	55.5
<b>Women</b>	58.2	57.4	59.4	53.3	54.8

Source: Eurostat, 2013

**Table A2.9. Long-term unemployment, 12 months and more (as % of total unemployed, 15-74)**

	2007	2008	2009	2010	2011
<b>% of unemployed</b>	84.8	84.9	81.6	83.1	82.6

Source: ETF calculation on Eurostat, 2013

**Table A2.10. Registered unemployed by gender, (000, 15+), at the end of the year**

	2007	2008	2009	2010	2011*
<b>Total</b>	357	343	341	321	322
<b>Men</b>	209	198	191	185	185
<b>Women</b>	148	145	150	136	137

Source: CPESSEC, 2013

Note: \* Data refer to January 2011

**Table A2.11. The expenditure on active labour market provision (ALMP) as % of GDP**

	2007	2008	2009	2010	2011
<b>% of GDP</b>	m.d.	0.1	0.2	0.1	0.1

Notes: Data refer to allocated funds; 2011 value is calculated with respect to the planned GDP level; m.d. refers to missing values

Source: Ministry of Labour and Social Policy

**Table A2.12. The coverage of active labour market provision (% of the registered unemployed)**

	2007	2008	2009	2010	2011 (planned)
<b>No.</b>	m.d.	6,565	12,162	6,947	7,265
<b>% of registered unemployed</b>	m.d.	2.0	1.9	2.1	m.d.

Note: m.d. refers to missing data

Source: Ministry of Labour and Social Policy



**Table A2.13. The Former Yugoslav Republic of Macedonia and EU Benchmarks - Labour Market (2011)**

	EU 27	EU 2020 objectives	MK
<b>Employment rate (20-64) - 2012</b>	<b>68.2</b>	75%	48.2*
<b>Employment rate (15-64)</b>	<b>64.3</b>		43.9
<b>Female employment rate (15-64)</b>	<b>58.5</b>		35.3
<b>Employment rate of older workers (55-64)</b>	<b>47.4</b>		35.4*
<b>Employment in agriculture (% of total) (1)</b>	<b>4.6</b>		18.7
<b>Unemployment rate (15+)</b>	<b>9.6</b>		31.4
<b>Female unemployment rate (15+)</b>	<b>9.6</b>		30.8
<b>Youth unemployment rate (15-24)</b>	<b>21.3</b>		55.3*
<b>Unemployment rate of the elder workforce (55-64)</b>	<b>6.8</b>		28.2*
<b>Total long-term unemployment rate (%) (2)</b>	<b>4.1</b>		25.9*

**Notes:** (1) Agriculture, forestry and fishing; (2) Long-term unemployed (12 months and more) as a percentage of the total active population

**Sources:** (EU27) Eurostat, 2013; (MK) SSO, 2012a (\* ETF calculation)

**Table A2.14. Employment rates by educational level (15-64), %**

	2007	2008	2009	2010	2011
<b>ISCED 0-2</b>	24.8	26.2	27.2	26.6	27.3
<b>ISCED 3-4</b>	47.4	49.7	49.9	49.9	49.4
<b>ISCED 5-6</b>	69.8	70.1	70.6	70.7	68.4
<b>Total</b>	<b>40.7</b>	<b>41.9</b>	<b>43.3</b>	<b>43.5</b>	<b>43.9</b>

**Source:** Eurostat, 2013

**Table A2.15. Unemployment rates by educational level (15+), %**

	2007	2008	2009	2010	2011
<b>ISCED 0-2</b>	43.6	42.0	39.2	39.8	38.2
<b>ISCED 3-4</b>	35.2	33.1	32.3	32.1	31.6
<b>ISCED 5-6</b>	20.6	21.4	21.3	21.8	23.0
<b>Total</b>	<b>35.2</b>	<b>34.0</b>	<b>32.3</b>	<b>32.2</b>	<b>31.6</b>

**Source:** Eurostat, 2013

**Note:** Difference in the figures between this version and the last one are due to adjustment done by Eurostat in its database.

**Table A2.16: GDP per capita and real growth of GDP**

	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
<b>Annual GDP growth</b>	6.1	5.0	-0.9	1.8	3.0
<b>GDP per capita in PPP (current international \$)</b>	9,483	10,723	11,152	11,083	11,258

**Source:** The World Bank, 2013

**Note:** Difference in the figures between this version and the last one are due to adjustment done by the World Bank in its database.

**Table A2.17: Competitiveness Index**

	<b>2010-2011 (out of 139)</b>	<b>2011-2012 (out of 133)</b>	<b>2012-2013 (out of 144)</b>	
<b>Global Competitiveness Index</b>	<b>Rank</b>	<b>Rank</b>	<b>Rank</b>	<b>Score</b>
	79	79	80	4.0

**Source:** World Economic Forum, 2012a.

### 3. EDUCATION

**Table A3.1: Adult literacy rates by gender**

	<b>2010*</b>
<b>Total</b>	97.3
<b>Male</b>	98.7
<b>Female</b>	95.9

Source: UIS. 2013 (\*UIS estimates)

**Table A3.2. Budget of Ministry of Education and Science, including expenditure on education as % of GDP (MKD). 1 EUR = 61,62 MKD (05/05/2012)**

	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
GDP	410,734,000,000	434,112,000,000	449,632,000,000	490,156,000,000
Central budget on all accounts and users (budget bill, self-financing, loans and donations)	113,279,940,000 0	112,162,075,000 0	120,222,256,000 0	121,961,350,000
<b>Total budget MES</b>	20,305,267,000	19,524,091,000	21,107,567,000	21,740,439,000
<b>As % of GDP</b>	<b>4.94%</b>	<b>4.50%</b>	<b>4.69%</b>	<b>4.44%</b>
% of total budget of MES in the total central budget	17.92%	17.41%	17.56%	17.83%
Budget Bureau for Development of Education	175,724,000	128,523,000	127,067,000	132,265,000
Budget National Agency European Education Programmes and Mobility	24,657,000	21,817,000	20,165,000	20,210,000
<b>TOTAL budget for education</b>	<b>20,505,648,000</b>	<b>19,674,431,000</b>	<b>21,254,799,000</b>	<b>21,892,097,000</b>
<b>% of GDP</b>	<b>4.99%</b>	<b>4.53%</b>	<b>4.73%</b>	<b>4.47%</b>

Source: Ministry of Education and Science, data provided in 2011 and in 2012.

**Table A3.3. Working age population (15-79) by educational attainment and gender, 2011 (shares)**

	<b>Total</b>	<b>Men</b>	<b>Female</b>
<b>Total</b>	100	100	100
<b>Without education</b>	2.2	1.1	3.4
<b>Incomplete primary and lower secondary education</b>	8.0	5.4	10.6
<b>Primary and lower secondary education</b>	31.4	28.5	34.3
<b>3 years of upper secondary education</b>	9.4	11.9	6.9
<b>4 years of upper secondary education</b>	34.4	38.2	30.6
<b>Higher education</b>	2.5	2.8	2.2
<b>University level education</b>	12.0	12.1	12.0

Note: University level education includes: university level education, Master's degree and PhD.

Source: SSO, 2012a

**Table A3.4. Gross enrolment rates by education level and gender**

		2008	2009	2010	2011	2012
<b>Pre-primary</b>	Female	27.7	29.6	30.3	39.8	43.8
	Male	28.0	30.2	31.6	40.6	45.6
	Total	27.9	29.9	31.0	40.2	44.8
<b>Primary</b>	Female	118.2	110.7	105.7	118.8	118.2
	Male	118.7	112.7	107.4	118.8	117.9
	Total	118.4	111.8	106.5	118.8	118.0
<b>Lower secondary</b>	Female	120.5	112.0	113.8	95.5	92.7
	Male	96.8	112.0	115.0	96.4	93.7
	Total	108.2	112.0	114.4	96.0	93.2
<b>Upper secondary</b>	Female	87.3	90.1	95.7	98.2	99.1
	Male	83.8	88.2	92.1	97.0	96.5
	Total	85.5	89.1	93.8	97.6	97.7
<b>ISCED 5 and 6</b>	Female	42.3	50.6	52.9	...	...
	Male	34.2	39.4	42.6	...	...
	Total	38.2	44.9	47.6	...	...

**Note:** “...” refers to missing data. Difference in the figures between this version and the last one are due to adjustment done by UNESCO in its database.

**Source:** UIS, 2013

**Table A3.5. Macedonia and the EU benchmarks – Education and Training, 2012**

	EU 27	EU 2020 objectives	MK
<b>Early school leavers</b> % of 18-24 with at most lower secondary education and not in further education or training	<b>12.9<sup>e</sup></b> (2012)	10%	12.0 <sup>e</sup> (2012)
<b>Tertiary educational attainment</b> % of 30-34 who have successfully completed university or university-like education	<b>35.5<sup>e</sup></b> (2012)	40%	21.7 <sup>e</sup> (2012)
<b>Lifelong learning*</b> % of 25-64 participating in education and training	<b>9.1<sup>e</sup></b> (2012)	15%	3.9 <sup>e</sup> (2012)
<b>Four-year-olds in education - Participation rate (%)*</b>	<b>92.4</b> (2010)	at least 95%	29.6 (2010)

**Sources:** (EU27) Eurostat, 2013

**Notes:** m.d. refers to missing data; \* The indicators refers to the European Strategy and Co-operation in Education and Training.

**Table A3.5.1: Progress in 2009-2010 of the education headline indicators of the EU-2020**

	Former Yugoslav Republic Macedonia					EU-27 average				
	2006	2009	2010	2011	2012 <sup>e</sup>	2006	2009	2010	2011	2012 <sup>e</sup>
	<b><i>Early school leaving</i></b>									
Total	22.8%	16.2%	15.5%	13.5%	12.0%		14.4%	14.1%	13.5%	12.9%
Female	25.9%	18.5%	17.5%	15.2%	12.5%		12.5%	12.2%	11.6%	11.1%
	<b><i>Tertiary education attainment</i></b>									
Total	11.6%	14.3%	17.1%	20.4%	21.7%	28.9%	32.3%	33.6%	34.6%	35.5%
Female	12.8%	16.8%	18.0%	22.4%	22.6%	31.5%	35.7%	37.2%	38.5%	39.6%

**Note:** This headline indicator has two components and is defined as follows: the share of early school leavers should be under 10% and at least 40% of 30-34 years old should have completed a tertiary or equivalent education. Definitions: (i) Early school leavers are not a synonym of school drop out, but are defined as: percentage of the population of age 18-24 with at most lower secondary education and not in further education or training; (ii) The share of the population aged 30-34 years who have successfully completed university or university-like (tertiary-level) education with an education level of 5-6 (ISCED 1997). e= Estimates

**Source:** Eurostat, 2013

**Table A3.5.2: Summary of seven EU Education and Training 2020 (ET2020) benchmarks (14/04/2013)**

(i)	<b>At least 95% of children between the age of four and the age of starting compulsory education should participate in early childhood education and care.</b> With 29.6% against the EU-27 average of 92.3% <sup>16</sup> , the country shows a very challenging situation.
(ii)	<b>The share of 15 years-olds with insufficient abilities in reading, mathematics and science should be less than 15%:</b> without any participation in PISA after 2000, it is not possible to establish the actual country performance as regards this benchmark. In 2013, the Ministry of Education and Science and the OECD have advanced negotiations in preparation for the country's participation in PISA 2015. The country performance in TIMSS 2011 (8 <sup>th</sup> grade students, in maths and science) showed a visible decline in comparison with previous participation (2003).
(iii)	<b>The share of early leavers from education and training should be less than 10%</b> <sup>17</sup> : with a remarkable improvement of 10.8 percentage points between 2006 and 2012 (from 22.8 to 12.0%), the country performs better than the EU-27 average (12.9%). Unlike most EU countries, the female indicator is slightly worse than the male.
(iv)	<b>Share of the 30-34 year-olds with tertiary education should be at least 40%:</b> progress has been impressive between 2006 and 2012. With an increase by 10.3 percentage points, the country reached 21.7% (against the EU-27 average of 35.5%, 2012), and placed itself in situation comparable with many lower performing EU countries <sup>18</sup> . In line with trends elsewhere the female indicator is higher (22.6%).
(v)	<b>An average of at least 15% of adults (age group 25-64) should participate in lifelong learning:</b> 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 Turkey <sup>19</sup> ). 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.
(vi)	<b>At least 20% of higher education graduates and 6% of 18-24 years-olds with an initial VET qualification should have had a period of study abroad.</b> The European Commission's Education and Training Monitor 2012 specifies that graduate data are not yet available for many countries and it is not possible to indicate the level at which the benchmark currently lies. Looking at enrolment data, the country performs relatively well, with 6.6% (2010) of all higher education students enrolled in another EU member state, EEA or candidate country <sup>20</sup> .
(vii)	<b>The share of employed graduates (20-34 year-olds) having left education and training no more than three years before the reference year should be at least 82%.</b> With its high unemployment rate and low employment rate, it is evident that the country has a long way to go to reach the benchmark. In 2011, the total country employment rate (population 20-64) was 48.4% (and only 38.8% for females), which compares low with the EU-27 average of 75.2% (and 62.3% females) <sup>21</sup> .

<sup>16</sup> European Commission, Education and Training Monitor 2012, SWD(2012) 373/2. Accessed: 18/03/2013, Available from: [http://ec.europa.eu/education/news/rethinking\\_en.htm](http://ec.europa.eu/education/news/rethinking_en.htm)

<sup>17</sup> [http://epp.eurostat.ec.europa.eu/portal/page/portal/europe\\_2020\\_indicators/headline\\_indicators](http://epp.eurostat.ec.europa.eu/portal/page/portal/europe_2020_indicators/headline_indicators)

<sup>18</sup> [http://epp.eurostat.ec.europa.eu/tgm/refreshTableAction.do?tab=table&plugin=0&pcode=t2020\\_41&language=en](http://epp.eurostat.ec.europa.eu/tgm/refreshTableAction.do?tab=table&plugin=0&pcode=t2020_41&language=en)

<sup>19</sup> European Commission. 2001 c, pg 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 persons aged 25 to 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 to the question '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.

<sup>20</sup> European Commission, Education and Training Monitor 2012, SWD(2012) 373/2. Accessed: 18/03/2013, Available from: [http://ec.europa.eu/education/news/rethinking\\_en.htm](http://ec.europa.eu/education/news/rethinking_en.htm). Page 41.

<sup>21</sup> [http://epp.eurostat.ec.europa.eu/tgm/refreshTableAction.do?tab=table&plugin=0&pcode=t2020\\_10&language=en](http://epp.eurostat.ec.europa.eu/tgm/refreshTableAction.do?tab=table&plugin=0&pcode=t2020_10&language=en)

**Table A3.6. Students in secondary education according to the type of education**

Type of education	2007/2008 <sup>22</sup>	2008/2009 <sup>23</sup>	2009/2010 <sup>24</sup>	2010/2011 <sup>25</sup>	2011/2012 <sup>26</sup>
	Total	Total	Total	Total	Total
<b>Secondary education / total</b>	94545	93843	95343	94155	93064
General education	38214	38373	38527	38013	37646
Art education	854	1015	1221	1071	1080
<b>Vocational education</b>	<b>55477</b>	<b>54455</b>	<b>55595</b>	<b>55071</b>	<b>54338</b>
<b>VET students as % of total in secondary education</b>	<b>58.7%</b>	<b>58.0%</b>	<b>58.3%</b>	<b>58.49</b>	<b>58.39</b>

Source:

\* State Statistical Office of the Republic of Macedonia, Statistical review : Population and Social statistics, 2.4.11.04/683

\*\*State Statistical Office of the Republic of Macedonia, Statistical review : Population and Social statistics, 2.4.12.04/718

**Table: A3.7 Graduated higher education students by fields of study**

Year	Total graduated students	Natural sciences and mathematics (%)	Technical & technological sciences (%)	Medical sciences (%)	Biotechnical sciences (%)	Social sciences & humanities (%)
2000	3338	7,43%	20,31%	9,68%	4,25%	58,33%
2005	5132	7,21%	12,84%	6,88%	5,87%	44,02%
2007	7835	5,19%	11,68%	5,18%	4,77%	73,17%
2008	10027	5,92%	12,06%	5,62%	2,96%	73,43%
2009	9570	5,49%	16,26%	5,83%	3,95%	68,47%
2010	9030	3,77%	14,91%	4,95%	3,36%	73,02%
2011	9223	4,76%	17,11%	4,47%	2,31%	71,35%

Source: SSO, Graduated students, 2011, Statistical review 2.4.12.12/729

<sup>22</sup> SSO of the RM, Primary and secondary schools at the beginning of the school year (for 2008, 2009 and 2010 )

<sup>23</sup> Ibid, 2009.

<sup>24</sup> Ibid, 2010

<sup>25</sup> SSO of the RM, News release: Population and social statistics, 2.4.11.04/683

<sup>26</sup> SSO of the RM, News release: Population and social statistics, 2.4.12.04/718

#### 4. SOCIAL INCLUSION

**Table A4.1. Poverty rates (70% of median equivalised expenditure), headcount (%)**

	2007	2008	2009	2010	2011
<b>% of poor population</b>	29.4	28.7	31.1	30.9	

Source: SSO, 2012c

**Table A4.2. Absolute poverty rates (\$2 a day per person, PPP), headcount (%)**

	2006	2007	2008	2009	2010	2011
<b>% of poor population</b>	4.6	m.d.	4.5	5.9		

Note: m.d. refers to missing data

Source: The World Bank, 2013

**Table A4.3. Gini index**

	2006	2007	2008	2009	2010	2011
Gini index	43	m.d.	44.2	43.2		

Source: The World Bank, 2013

**Table A4.4. Gender-related indexes**

		<b>Gender empowerment index</b>	<b>Gender related development index</b>
<b>2007</b>	Rank	35 (out of 93)	62 (out of 155)
	Value	0.625	0.812
<b>2008</b>	Rank	m.d.	m.d.
	Value	m.d.	m.d.
<b>2009</b>	Rank	35 (out of 109)	m.d.
	Value	0.641	m.d.

**Notes:** m.d. refers to missing data; gender-related development index aims to show the inequalities between men and women in the following areas: long and healthy life, knowledge, and a decent standard of living. It ranges between 0 (inequality) to 1 (equality); gender empowerment index measures the participation of women and men in political decision-making. It has four indicators: female members of the Legislature, female participation in selected positions in public and private sector, female participation in academic and technical work, and estimated income.

Sources: UNDP, 2009a, 2008a, 2007a



**Table A4.4.1. Gender-related indexes**

		<b>Gender gap index</b>
<b>2007</b>	Rank	35 (out of 128)
	Value	0.697
<b>2008</b>	Rank	53 (out of 130)
	Value	0.691
<b>2009</b>	Rank	53 (out of 132)
	Value	0.695
<b>2010</b>	Rank	49 (out of 134)
	Value	0.700
<b>2011</b>	Rank	53 (out of 135)
	Value	0.697
<b>2012</b>	Rank	61 (out of 135)
	Value	0.697

**Source:** World Economic Forum, 2012b

**Notes:** gender gap index examines the gap between men and women in four fundamental categories, i.e. economic participation and opportunity, educational attainment, health and survival and political empowerment. Its highest possible score is 1 (equality) and the lowest possible score is 0 (inequality).

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