

# ETF KEY INDICATORS 2010

## OVERVIEW AND ANALYSIS



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# 1. INTRODUCTION

The European Training Foundation (ETF) has a vision to make vocational education and training (VET) in the partner countries a driver for lifelong learning and sustainable development, with a special focus on competitiveness and social cohesion. It is therefore of crucial importance to the ETF and its partners that a solid evidence base is established covering VET and its links with the labour market, and more broadly with national policies relating to economic development, social cohesion, entrepreneurship and innovation.

Recent years have seen an increased interest in evidence-based policy making. This has naturally led to a renewed emphasis on quantitative indicators as part of a broader evidence base to support policy-makers in formulating, monitoring and evaluating VET policies and the performance of VET systems. In 2010 the ETF launched a series of reviews of VET policies and systems in all of its partner countries known as the Torino Process. In order to inform these assessments with quantitative data, the ETF put in place a collection of VET policy and system indicators covering all 29 partner countries covered by its mandate in 2010.

This paper is primarily intended as a ready source of information for national policy-makers and the international community on the state of play of VET policies and systems in ETF partner countries. By including data for the EU-27, the report also sets out to inspire policy learning and dialogue both between the European Union (EU) and partner countries, and among the partner countries themselves. The paper is intended to enhance awareness among policy-makers in partner countries of the importance of indicators in driving the policy cycle, and of the availability and sources of VET policy and system indicators in their country and region. Given the increasing international attention on the contribution of skills in international development, and the related need to enhance the availability of robust information for policy-makers<sup>1</sup>, the paper also shares the ETF approach to this field. The paper can be read on its own, or as a complement to the ETF Torino reports and country studies, which are available on the ETF website.

The paper presents a brief overview of the methodology used by the ETF and the partner countries to collect and analyse the indicators. It also provides a schematic illustration of the state of play of VET policies and systems in the ETF partner regions, as illustrated by a selected group of 'Key Indicators'. In a technical annex to this report the ETF also presents the full framework and interpretation of standard policy and system indicators that were used in 2010 across its partner countries.

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<sup>1</sup> See outcomes from the G20 summit in Seoul.

## 2. THE PROCESS OF COLLECTING AND ANALYSING THE 2010 KEY INDICATORS

In 2010 the ETF key indicators were to be used as the basis of an assessment of the VET systems in all the ETF partner countries<sup>2</sup>. Hence, a theoretical framework inspired by the Copenhagen Process for these assessments was created, so that it would be possible to identify indicators that (i) would assist the assessments, and (ii) were likely to be available. At the same time the ETF indicators needed to be useful for other, more specialised reports, so after extensive consultations with labour market experts, country managers and education specialists, an extensive list of indicators for 2010 was finalised in December 2009 (see Annex 1). The list covers indicators on education and training, the labour market and public employment services (PESs), as well as socioeconomic variables to provide context.

### 2.1 SOURCES OF AND PROCESS FOR COLLECTING THE INDICATORS

In order to minimise the workload for national authorities, an extensive search of publicly available sources was undertaken before requests were made for additional indicators. In practical terms this meant that the ETF statistical team<sup>3</sup> drew on information available on the websites of all the ministries of education and labour as well as all the national statistical offices of the partner countries to gather data and indicators. Databases were queried and yearbooks perused. In addition, international data sources were consulted to collect comparable data. As a general principle, when consulting the international data sources the team consulted the primary international source. Apart from national data, the UNESCO Institute for Statistics (UIS) has been the main source for education data, and the International Labour Organisation (ILO) has been the main source for data on employment and unemployment. Data on gross domestic product (GDP) and population structures were collected from the World Bank. Data and indicators have also been gathered from the World Economic Forum on competitiveness and from the World Bank's Ease of Doing Business Survey. However, international sources cannot provide data for all the indicators of interest and they are particularly weak on data for VET.

### 2.2 NATIONAL DATA REQUESTS

Following this initial phase, a second phase was initiated in which national authorities were contacted directly by the ETF statistical team. Each request spelled out what data had been found during the first phase and requested assistance for a list of specified indicators. Depending on the national statistical infrastructures, one request might have been made to the national statistical office – this was the most common approach – or several requests might have been targeted at different authorities, i.e. education data were in some circumstances requested directly from the Ministry of Education and data on the PESs requested from the Ministry of Labour or directly from the relevant PES.

The resulting data were then consolidated in the ETF through extensive dialogue with the original data providers and cross-consultation with the existing international data sources. Finally, the complete sets of indicators were used in the ongoing VET system assessments in the ETF partner countries.

### 2.3 USE OF THE KEY INDICATORS

Once they had been consolidated, the indicators were used first for country reports, and later for regional reports assessing VET systems. For the regional reports, four regional tables with a selection of the latest available indicators and EU averages were produced, and these tables are reproduced and analysed in Chapter 3.

<sup>2</sup> A small group of countries produced self-assessments of their education and training systems, which generally did not rely on the ETF key indicators. In Israel the national country team provided a set of key indicators to the ETF and also included these indicators in the country report as an annex.

<sup>3</sup> The statistical team here refers to the quantitative analyst and the statistical officers.

## 2.4 LIMITATIONS AND COVERAGE OF THE KEY INDICATORS

It is important not to overinterpret the indicators. No indicator is more reliable than the underlying data. For several of these indicators it is recognised that important elements are missing or underrepresented. For example, many of the countries covered by this analysis have large informal economies, but since reliable data on this are absent in most of the countries, no comparable indicator has been included. There is also a lack of robust data on the extent of private funding of education and training, including the cost of training to employers. But the absence of some indicators that it would have been useful to analyse makes it even more imperative that the indicators that do exist are analysed properly, since the existing indicators occasionally serve as proxies for the missing indicators. In-depth analysis of each country can be found in the country reports available on the ETF website. These country reports also include a vast amount of qualitative evidence that complements the quantitative indicators.

Further details on the coverage of the indicators collected by the ETF are included in a technical annex, which will be published as a separate document accompanying this publication. In that annex, a comprehensive overview is given of the coverage and compliance with international standards of each indicator. A short description of the indicator coverage will conclude the analysis of each region.

## 3. KEY INDICATORS BY REGION

This chapter describes briefly the four regions using selected key indicators, which cover not only the sociodemographic information, but also data on the labour market and education and training. All of the indicators represent the latest available data collected through the 2010 ETF Key Indicators project.

### 3.1 WESTERN BALKANS AND TURKEY

The Western Balkan and Turkey region<sup>4</sup> consists of a group of small countries, with populations ranging from 0.6 million in Montenegro and 7.4 million in Serbia, to 73.9 million in Turkey (2008, see **TABLE 3.1**, p. 11). Many countries have relatively young populations, as demonstrated by the child dependency rates for 2008. The countries with the youngest populations are, in descending order, Kosovo<sup>5</sup> (child dependency rate of 44.7%), Turkey (40.7%), Albania (36.4%), Montenegro (28.9%) and the former Yugoslav Republic of Macedonia (26.3%). These high proportions of young people in the population need to be taken into account when assessing the situation within the education and training systems, as the increasing number of pupils entering the education system puts pressure not only on the education budget, but also on the quality of education provided. On the other hand, some of the countries are also experiencing clear signs that their population is ageing; for example, Croatia has an old-age dependency rate of 25.4%. In addition, life expectancy is fairly high in the region, although it is below the EU-27 average (2007) of 79.2 years, ranging from 69.4 years in Kosovo to 76.6 years in Albania (2008).

As mentioned, the increasing number of pupils in many of these countries represents additional pressure on the education budget, at a time when countries are experiencing constraints on their finances. Most of the countries within the region can be characterised as middle-income economies, except for the richest, Croatia, with 17 000 international dollars per capita (2008). The main economic sector in all the countries in the region is services, although its share of GDP is still below the EU-27 average of 71.8% in all the countries except Montenegro (2008). At the same time the agricultural sector continues to play an important role, and its share of GDP in 2008 was around 10% of GDP except in Albania, where this sector accounted for as much as 20.8% of GDP. As seen from the data, education is not the main priority in these countries, since educational expenditure is below the EU-27 average, and ranged from 2.9% of GDP in the former Yugoslav Republic of Macedonia and Turkey in 2006, to 4.5% of GDP in Serbia in 2007. These low levels of investment in education are reflected in the education attainment levels of the populations, which are generally fairly low, though with great variations. The proportion of 25–64-year-olds having completed at least upper secondary education varied from 26.6% in Turkey to 75.9% in Croatia in 2008. Both Serbia and Croatia have higher shares of people with at least upper secondary education than the EU-27 average of 71.4%. Examination of gross enrolment rates reveals a fall in school participation at the end of lower secondary education in all countries for which data are available.

With regard to VET, except in Albania a large proportion of students who continue studying at the upper secondary education level are enrolled in VET institutions. In 2008 this share of VET participation at ISCED 3 level varied from 16.3% of students in Albania to a high of 76.1% of students in Serbia. Furthermore, except in Albania the share of private education is very low in the case of both VET (8.4% of upper secondary institutions in 2008) and general education (8.9% of upper secondary institutions in 2008).

According to labour market data, the level of employment is below the EU-27 average, ranging from 40.1% in Bosnia and Herzegovina to 56.6% in Croatia in 2009. Kosovo is a special case: here, only 21.8% of the working-age population were employed in 2008. The unemployment rates are not fully comparable owing to the different ranges of populations used. Nevertheless, it can be seen that the levels are usually much higher than the EU-27 average as mentioned above, especially in Kosovo, where almost half of the labour force aged 15–64 years was unemployed in 2008. In addition, there is no significant gap between male and female unemployment rates except in Kosovo, where the proportion of unemployed females aged 15–64 years was higher (59.6% in 2008) than the proportion of unemployed males. A clear problem in the region is the persistent high level of youth unemployment, which is most evident in Kosovo (73% of the labour force aged 15–24 years were unemployed in 2008), the former Yugoslav Republic of Macedonia, and Bosnia and Herzegovina. However, such high unemployment levels cannot simply be interpreted as signs of failing education systems. Rather, given their persistence, the problem must be related to low levels of job creation.

#### 3.1.1 Indicator coverage

The coverage of labour market indicators is quite comprehensive. In the case of main indicators – activity, employment and unemployment rates by specific breakdowns – the information is provided for all countries except Bosnia and

<sup>4</sup> Enlargement region covered by the EU's Instrument for Pre-accession Assistance (IPA).

<sup>5</sup> Under UNSCR 1244/1999, hereinafter referred to as 'Kosovo'.



Herzegovina, where data on the education dimension are not available. However, when focusing on youth unemployment by education level and gender, there is a lack of data in half of the countries. Educational indicators provide some general information on the education attainment of the population, the number of pupils by education level and programme, and literacy rates. However, there is little or no detailed information available. This is the case, for example, for indicators on education attainment of the population by income groups and by urban/rural area (available only for Kosovo and Serbia) and for participation in lifelong learning by education level and gender (available only for Albania and Croatia). Most of the socioeconomic context indicators are collected from international sources, so the indicator coverage is high and up-to-date. The only missing information relates to PISA, in which only six countries take part, namely Albania, Croatia, the former Yugoslav Republic of Macedonia, Montenegro, Serbia and Turkey. In addition, information on GDP per capita and the Global Competitiveness Index is missing for Kosovo.

It can be concluded that the coverage of indicators selected in the Western Balkans and Turkey is high in the case of labour market and socioeconomic indicators. However, several gaps can be identified in the field of education, where detailed information on VET and adult education is missing, either completely or to a large extent.

## 3.2 SOUTHERN AND EASTERN MEDITERRANEAN

Populations in the southern and eastern Mediterranean region<sup>6</sup> vary from 3.9 million in the occupied Palestinian territory to 81.5 million in Egypt (2008) (see **TABLE 3.2**, p. 12). Five of the nine countries have more than ten million inhabitants, which is a higher proportion than in any of the other regions. All the countries have very young populations, as shown in the 2008 figures on child dependency rates, so the populations are growing. This is the case in the occupied Palestinian territory in particular, where the child dependency rate in 2008 was 87.1%. Moreover, the child dependency rates, together with those for the Central Asian countries, are the highest of all the regions with which the ETF cooperates. This implies a high level of pressure across the region on education systems, which will have to absorb more and more pupils. There could be serious consequences for the coverage and quality of the education provided if this demographic aspect is ignored.

In order to respond to increasing demand in the educational sphere, countries may be expected to invest more. In recent years, public expenditure on education has varied from 2.0% of GDP in Lebanon (2008) (although it must be stressed that education in Lebanon is characterised by a high level of private education, so the private expenditure on education in Lebanon is likely to far exceed the private expenditure in other ETF partner countries) to 6.2% of GDP in Israel (2006), which is well above the EU-27 average of 5% of GDP (2007). However, the resources in the southern and eastern Mediterranean region are quite limited. Most of these countries can be classified as middle-income economies; the exception is Israel, where GDP per capita in PPP (purchasing power parity) amounted to 27 900 international dollars in 2008. Thus, the response to the increasing demand for education and the consequent increase of educational expenditure will be highly dependent on the priorities of the governments, bearing in mind existing budgetary constraints.

At the same time the outcomes of education systems in the southern and eastern Mediterranean countries, as illustrated by the education attainment levels of their populations, are rather poor except in Israel, where 81.3% of people aged 25–64 had at least upper secondary education in 2009. According to the data collected, in 2007 only 29.1% and 31.7% of the population aged 15 years and over in Algeria and Tunisia respectively had at least upper secondary education. In Egypt and Lebanon the proportion of the population with at least upper secondary education was almost half of the population aged 15–64 in 2007. With regard to available data on gross enrolment rates, participation rates for primary education are high (except in the occupied Palestinian territory, where the enrolment rates in primary education are lower than those in secondary education). However, a decrease in enrolment can be perceived in Algeria, Lebanon and Morocco at the end of primary education, and in Egypt, Jordan, Syria and Tunisia at the end of lower secondary education. This could indicate a serious problem with respect to drop-outs and inadequate education for young people, which is then mirrored in the overall educational profiles of populations (see above) and also in their situation on the labour market, since young people in particular struggle with entering the labour market. Youth unemployment rates are high in all the countries, ranging from around 15% to around 39% of the labour force aged 15–24. Jordan is the notable exception, with a youth unemployment rate of only 4.8%, which surprisingly is even lower than the overall unemployment rate of 12.7% in 2007.

VET as a proportion of upper secondary education varies from country to country. On the one hand there are countries with a low share of VET at ISCED 3 level, such as Algeria (0.8% in 2007), Morocco (5.2% in 2008) and the occupied Palestinian territory (5.6% in 2008). On the other hand, VET represents a relative high share of students at ISCED 3 level in Egypt (61.1% in 2008) and Israel (37.3% in 2009). Finally, there are several private institutions in the southern and eastern Mediterranean countries in upper secondary education, although the share they represent is not very high except in Lebanon, where more than half of general education and VET institutions are private (2008).

6 Region covered by the European Neighbourhood Policy South (ENP South).

With regard to the situation on the labour market, the employment levels in the southern and eastern Mediterranean countries are very low in comparison to the EU-27 average of 64.4% in 2008. A significant gap is noticeable between male and female employment rates, as the number of working women is strikingly low, and the low employment rates in the region are predominantly a reflection of the very low participation rates of women. The only exception is Israel, where the female employment rate was 55.4% in 2009, which is close to the EU-27 average (58.2% in 2008). The unemployment figures are not easily comparable owing to the use of different age frames of populations. However, the levels tend to be rather high in many countries, especially in the occupied Palestinian territory (24.7% of the population aged 15–64 in 2009) and Tunisia (16.9% of the population aged 15–64 in 2007). As previously mentioned, youth unemployment is high in most of the countries, especially in the occupied Palestinian territory (38.9% of the labour force aged 15–24 in 2009) and Tunisia (31.4% of the labour force aged 15–24 in 2007). Furthermore, the unemployment rate for young females is much higher than that for young males in Algeria (40.2% in 2007), Egypt (47.9% in 2007), the occupied Palestinian territory (46.9% in 2009) and Syria (41.7% in 2009). A partial explanation of the situation in the labour markets of the southern and eastern Mediterranean region may be the mismatch between the supply of skills and labour market demand, which again presents a challenge for the education systems.

### 3.2.1 Indicator coverage

The coverage of labour market data is very comprehensive and up-to-date, covering activity, employment and unemployment rates for most of the countries. Only the indicator on youth unemployment by education level and gender is problematic. It is available for only three countries: Israel, Morocco and the occupied Palestinian territory. The data collected on the educational dimension are relatively poor in all the countries except Israel. Despite the existence of general indicators on education attainment, there are several gaps. In particular, data is missing on lifelong learning indicators (except for Tunisia and Israel) and on VET, including enrolment rates (except for Israel). Moreover, the data on both educational expenditure and the quality of education are very scarce, and this does not enable a comprehensive picture to be gained of the current situation in the region. In order to compensate for such a shortage of information, several partial and proxy indicators have been collected (see the technical annex for further details). Data referring to socioeconomic background can be found for most of the countries. The only exception is the PISA survey, which is available for only three countries, namely Israel, Jordan and Tunisia.

It can be concluded that the coverage of indicators selected is not comprehensive. Despite the existence of a large amount of up-to-date data for labour market and socioeconomic indicators, there is a serious shortage of information on the educational dimension.

## 3.3 EASTERN EUROPE

The populations of the countries in the eastern European region<sup>7</sup> vary from 3.1 million in Armenia to 141.8 million in the Russian Federation (2008/09 data) (see **TABLE 3.3**, p. 13). Five of the seven countries have less than ten million inhabitants. The population structure is quite heterogeneous. Some countries have relatively young populations. For instance, Armenia has a child dependency rate of 30.2% (2008) and Azerbaijan a child dependency rate of 32.1% (2009), which can again present a challenge for existing education systems since they are required to accommodate an increasing number of pupils. On the other hand, ageing population trends are evident in Ukraine (old-age dependency rate of 23.3%), Georgia (21.1%), Belarus (19.4%) and Russia (18.5%) (2008). In these countries, pressures on the welfare systems can be expected as the numbers of active and inactive people converge. At the same time there is a need for lifelong learning strategies in order to enable people of any age to remain active in the labour market. This goes hand in hand with the increasing life expectancy, which is around 70 years of age in this region, ranging from 67.8 in the Russian Federation to 73.5 in Armenia (2008). This suggests that there will be consequent pressure to integrate older workers and to increase the pension age.

The eastern European countries can be classified as middle-income economies. In terms of GDP per capita in PPP, the Republic of Moldova is the poorest country with 3 000 international dollars per capita, while the Russian Federation is the richest in the group, with 15 900 international dollars per capita. The agricultural sector is still important in Armenia (18% of GDP in 2009), the Republic of Moldova (11% in 2008) and Georgia (10% in 2008), in contrast to Azerbaijan (6% in 2008) and Russia (5% in 2007). Agriculture is less important than in Central Asian countries, but more important than in most southern and eastern Mediterranean countries. Although the largest economic sector in all countries except Azerbaijan is services, which account for between 46% (Armenia in 2009) and 74% (Republic of Moldova in 2008) of GDP, industry is relatively strong in this region.

Employment levels in the region are mostly higher than the EU-27 average of 53.7% (for a working-age population aged 15 years and over), except in Armenia, Georgia and the Republic of Moldova. Moreover, even though female employment rates are lower than those for males in all the countries, they are still higher than the EU-27 average of

<sup>7</sup> Region covered by the European Neighbourhood Policy East (ENP East).

46.6% (for the population 15 years and over). This can be explained by the legacy of the communist system, in which full employment was supposed to be achieved and maintained for both men and women.

With regard to education, the resources devoted to this are not particularly high, and are mostly below or close to the EU-27 average (5% of GDP in 2007). The only exception is the Republic of Moldova, where the education budget in 2008 was at a very high level of 8.2% of GDP. Nevertheless, the available data show that the education attainment levels in these countries are higher than in the other regions analysed and, at the same time, these attainment levels are above the EU-27 average, as the vast majority of people aged 25–64 years have at least upper secondary education. This is also reflected in the gross enrolment rates for 2008, with high enrolment levels up to upper secondary education. Only in Armenia and Belarus are slight decreases in enrolment levels seen at the end of lower secondary education. Furthermore, gross enrolment rates for higher education remain relatively high in Belarus, Ukraine and the Russian Federation. Thus, the level of human capital in the eastern European region is high in comparison to the other three regions. This is also partly projected into relatively low unemployment rates (2008 data, and 2007 data for Azerbaijan), which are close to the EU-27 average of 7.0% (for the labour force aged 15–74 years), although the data are not perfectly comparable. However, there are two exceptions with high unemployment levels: in Armenia and Georgia, 29.4% (aged 15–64 years) and 16.5% (aged 15+ years) of the labour force, respectively, are unemployed. The same is the case for youth unemployment, which presents a significant problem in both countries. In Armenia more than half of young people aged 15–24 were unemployed in 2008, and in the same year the figure for Georgia was as high as 35.6%. Possible explanations can be found in the overall low level of economic development and the consequent low level of resources dedicated to education in comparison to the situation in other countries in the eastern European region. This could further influence the quality and coverage of the formal education systems, especially when there is a high proportion of young people who need to be absorbed by the system, as is the case in Armenia. At the same time, especially in Armenia, a relatively high proportion of young people leave school in the early stages of education and are therefore not adequately prepared for entering the labour market.

VET accounts for a substantial proportion of students in most of the countries, ranging from 25% of upper secondary students in Ukraine to 47% of upper secondary students in the Russian Federation in 2008. The only exceptions are Armenia and Georgia, where the VET systems are very small, with only 5.0% and 2.6% of students in ISCED 3 respectively attending VET institutions in 2008/09. Finally, the proportion of private education institutions providing upper secondary education is very small, except for VET institutions in Azerbaijan, where 80.8% of VET at ISCED 3 level was private in 2008, and Georgia, where in the same year 27.1% of VET at ISCED 3 level was private.

### 3.3.1 Indicator coverage

The coverage of labour market indicators is fairly comprehensive. Nevertheless, one gap remains, namely the lack of available information by education level. Only in Armenia – and partly in the Republic of Moldova, Georgia and the Russian Federation – are data available on activity, employment and (youth) unemployment rates by education attainment level. Consequently, it is difficult to fully assess and compare the returns from education on the labour market for all the countries selected. Several problems arise when assessing the coverage of data in the educational field. First, some data are not up-to-date, in particular the indicators referring to the education attainment levels of the population in Belarus, Georgia, Armenia and the Russian Federation. Second, data is missing for several indicators, such as the indicators on lifelong learning (except in the Republic of Moldova) and VET including the gross enrolment rates (except in Armenia and Georgia), continuing education and apprenticeships. Data referring to the socioeconomic context provide a very comprehensive picture. The only gaps can be found in the case of Belarus, which does not participate in the PISA survey and the Global Competitiveness project. In addition, Armenia, Georgia, the Republic of Moldova and Ukraine do not take part in the PISA survey.

The coverage of the selected indicators is relatively good, especially in the case of labour market and sociodemographic data. On the other hand, despite the availability of general information on education, such as the education attainment of the population, literacy rates, number of pupils by education levels and educational expenditure, there is a lack of specific and more detailed information, in particular in the field of VET and lifelong learning.

## 3.4 CENTRAL ASIA

Central Asian countries<sup>8</sup> have populations ranging from 5.0 million in Turkmenistan to 27.3 million in Uzbekistan in 2008 (see **TABLE 3.4**, p. 14). These populations have a high proportion of young people; this can be seen in Tajikistan in particular, where the child dependency rate in 2008 was 63.9%. Even Kazakhstan, which has the lowest child dependency rate of the region (34.3%), has a much younger population than that of the EU, where the average child dependency rate is only 23.3%. This means that the formal education systems in this region experience huge strains as more and more pupils need to be accommodated.

<sup>8</sup> Region covered by the EU's Development Cooperation Instrument (DCI).

These strains will become enormous if the countries try to increase enrolment in upper secondary education. Uzbekistan has high enrolment rates in upper secondary education (113.5% in 2008) owing to an education reform that has made 12 years of education compulsory, whereas enrolment in upper secondary education in the other countries is only around 60% (2008). At the same time, VET seems to be rather limited, as in 2008 only 10.2% of students in Tajikistan, 13.0% in Kyrgyzstan and 26.0% of students in Kazakhstan attended vocational schools at ISCED 3 level. Uzbekistan is an exception, with 81.0% of students enrolled in vocational schools at the upper secondary level. With respect to the other education levels, gross enrolment rates are relatively high in the case of primary and lower secondary education, though after this there is a significant reduction in all the countries except for Uzbekistan (data missing for Turkmenistan).

Public expenditure on education in Central Asian countries is generally slightly lower than the EU-27 average of 5.0% of GDP (2007). Kazakhstan spent 4.0% and Kyrgyzstan 5.2% of GDP on education in 2008. In Tajikistan the level was lower, at only 3.5% of GDP in 2008. No data are available for Turkmenistan and Uzbekistan. It should therefore be possible for the countries of the region to allocate a larger share of their GDP to education in order to pay for higher enrolment levels and better-quality education.

Nonetheless, it must be kept in mind that all the countries are relatively poor in terms of GDP per capita, except Kazakhstan and Turkmenistan with their large oil and gas resources. Recent years have seen strong GDP growth across the region (data not shown in the table). The agricultural sector still plays an important role in all of the countries, especially in Kyrgyzstan (29.8% of GDP in 2008), Uzbekistan (21.4%) and Tajikistan (18.1%). Despite the continuing importance of agriculture, all the countries except Turkmenistan are dominated by large service sectors that accounted for around 50% of GDP in 2008. At the same time, Kazakhstan and Turkmenistan have strong industrial sectors, accounting for 41.9% and 53.7% of GDP respectively in 2008.

One striking aspect of the labour market data is that the employment rates in the region are higher than the EU-27 average, ranging from 55.4% in Tajikistan to 66.4% in Kazakhstan in 2008. The same applies for the female employment rates, which generally were around 50% in 2008 except in Kazakhstan, where the proportion of employed women out of the total female working-age population was 60.4%. These are lower than the male employment rates, but still higher than the EU-27 average for female employment, which was 46.6% in 2008. The unemployment rate in 2008 ranged from 6.6% in Kazakhstan to 8.2% in Kyrgyzstan (missing values for Turkmenistan and Uzbekistan), which is not very high, though it was higher (except for Kazakhstan) than the EU-27 average (7.0% for the working-age population aged 15–74 years in 2008). In addition, youth unemployment rates were much lower than the EU-27 average of 15.5% (2008). The youth unemployment rate for Kazakhstan was only 7.4% (for the age group 15–24) and 11.0% in Kyrgyzstan (although for the age group 15–34) in 2008. Data for youth unemployment are not available for other countries.

### 3.4.1 Indicator coverage

The coverage of labour market indicators is satisfactory except in Uzbekistan and Turkmenistan, where the amount of information available is very limited and often out-dated. With respect to the coverage of educational indicators, it can be concluded that general indicators relating to the education attainment of the population, literacy rates, and numbers of pupils at different education levels and programmes do exist (though to a lesser extent in Uzbekistan and Turkmenistan). Nevertheless, there is a lack of available information in the case of more specific indicators in all five countries, in particular those relating to VET. The socioeconomic indicators and indexes selected have a high level of coverage in all five countries, relying mainly on international data sources.

All in all, the availability of information in the Central Asia region must be described as fairly limited. While the main general indicators are covered, there is a lack of data on more specific and detailed indicators (for example, education attainment, age or gender). This is especially problematic when it comes to the indicators covering VET. The public availability of statistical information is generally weaker than in the other regions.

TABLE 3.1 KEY INDICATORS IN THE WESTERN BALKANS AND TURKEY

	Year	AL	BA	HR	XK	MK	ME	RS	TR	EU-27
Population, total (million)	2008	3.1	3.8	4.4	1.8	2.0	0.6	7.4	73.9	497.7
Dependency rates (% of working-age population)	2008	50.5	41.7	48.1	55.8	42.9	47.9	47.9	49.4	48.7
Dependency rates (aged 0–14 as % of working-age population)	2008	36.4	22.2	22.7	44.7	26.3	28.9	26.4	40.7	23.3
Dependency rates (aged 65+ as % of working-age population)	2008	14.0	19.5	25.4	11.0	16.6	19.0	21.5	8.7	25.4
Life expectancy, years	2008	76.6	75.1	75.9	69.4	74.2	74.1	73.6	71.9	79.2 <sup>(2)</sup>
GDP per capita, PPP (current international dollars, 000)	2008	7.3	8.1	17.7	...	9.3	13.4	10.6	13.4	...
GDP by economic sector (%)										
Agriculture, value added (% of GDP)	2008	20.8	9.1	6.4	12.0	10.9	8.8	13.0 <sup>(2)</sup>	8.6	1.8
Industry, value added (% of GDP)	2008	19.6	28.5	28.4	20.0	34.0	17.8	28.4 <sup>(2)</sup>	27.6	26.4
Services, etc., value added (% of GDP)	2008	59.6	62.4	65.1	68.0	55.1	73.4	58.6 <sup>(2)</sup>	63.7	71.8
Global Competitiveness Index (rank, out of 133)	2009–10	96	109	72	...	84	62	93	61	...
Employment rates (% total aged 15–64)	2009	53.8 <sup>(1)</sup>	40.1	56.6	21.8 <sup>(1)</sup>	43.3	48.4	50.0	44.3	64.6
Employment rates (% female aged 15–64)	2009	45.6 <sup>(1)</sup>	29.3	51.0	9.4 <sup>(1)</sup>	33.5	41.6	39.3	33.5	58.6
Youth unemployment rates (% aged 15–24)	2009	27.2 <sup>(1)</sup>	48.7	25.9	73.0 <sup>(1)</sup>	56.6	35.6	42.5	22.2	19.8
Youth unemployment rates (% female aged 15–24)	2009	27.2 <sup>(1)</sup>	52.7	31.1 <sup>(3)</sup>	81.8 <sup>(1)</sup>	26.3	35.6	48.3 <sup>(2)</sup>	6.9	18.5
Unemployment rates (% total aged 15+)	2009	13.0 <sup>(5)</sup>	24.1	9.3	47.5 <sup>(5)</sup>	32.4	19.1	19.7	11.8	8.9 <sup>(10)</sup>
Unemployment rates (% female aged 15+)	2009	13.7 <sup>(5)</sup>	25.6	10.8	59.6 <sup>(5)</sup>	32.1	20.5	18.4	11.8	8.9 <sup>(10)</sup>
Participation in lifelong learning (% total aged 25–64)	2009	2.0 <sup>(1)</sup>	...	2.3	...	3.3	...	...	2.3	9.4 <sup>(1)</sup>
Completion of at least upper secondary education (% total aged 25–64)	2008	47.5	...	75.9	...	59.2	68.0	74.2 <sup>(7)</sup>	26.6	71.4
Gross enrolment rate – primary (ISCED 1)	2008	102.1 <sup>(4)</sup>	109.3	98.6 <sup>(2)</sup>	...	92.8 <sup>(2)</sup>	...	98.3 <sup>(6)</sup>	99.3	...
Gross enrolment rate – lower secondary (ISCED 2)	2008	98.9 <sup>(4)</sup>	105.1	99.8 <sup>(2)</sup>	...	91.9	...	96.7 <sup>(6)</sup>	91.1	...
Gross enrolment rate – upper secondary (ISCED 3)	2008	56.2 <sup>(4)</sup>	77.5	87.6 <sup>(2)</sup>	...	76.0	...	80.9 <sup>(6)</sup>	72.5	104.5
Gross enrolment rate – tertiary (ISCED 5+6)	2008	19.3 <sup>(4)</sup>	33.5 <sup>(2)</sup>	47.0 <sup>(2)</sup>	...	40.4	...	47.8 <sup>(6)</sup>	38.4	...
Participation in VET (% of upper secondary)	2008	16.3	75.1	72.4	56.9	59.8	...	76.1	40.4	48.9
Student/teacher ratio in VET (ISCED 3)	2008	14.7 <sup>(3)</sup>	...	7.3 <sup>(2)</sup>	17.4 <sup>(6)</sup>	14.5	...	9.8	14.3 <sup>(3)</sup>	...
Student/teacher ratio in general education (%) (ISCED 3)	2008	19.7 <sup>(3)</sup>	...	10.2 <sup>(2)</sup>	20.9 <sup>(6)</sup>	14.6	...	12.4	20.2 <sup>(3)</sup>	...
Private VET (% of total VET) – ISCED 3	2008	8.4	...	7.2 <sup>(2)</sup>	...	1.9	...	1.1	5.3	25.2
Private general education (% of total general education) – ISCED 3	2008	8.9	...	0.6 <sup>(2)</sup>	...	0.5	...	0.3	0.1	13.9
Public expenditure on education (% of GDP)	2008	3.5	...	4.1 <sup>(2)</sup>	...	2.9 <sup>(3)</sup>	3.4 <sup>(2)</sup>	4.5 <sup>(2)</sup>	2.9 <sup>(3)</sup>	5.0 <sup>(2)</sup>

Notes: ... = missing data. (1) 2008. (2) 2007. (3) 2006. (4) 2004. (5) 2008 (15–64). (6) Public institutions. (7) Percentage of the population aged 25–64 with at least 'medium' education. (8) Age group 25–49. (9) Age group 25–54. (10) Age group 15–74. (i) Provisional value. (e) National estimates.

Sources: Agency for Statistics of Bosnia and Herzegovina (ASBA); Census of Population 2002, Serbia (CP); Centre of Public Employment Services of Southeast European Countries (CPESSEC); Croatian Bureau of Statistics (CBS); Demographic and Health Survey, Kosovo (DHS); Employment Agency of Montenegro (EAM); Eurostat; Eurostat (2009), Pocketbook on Candidate and Potential Candidate Countries, Luxembourg (PCPC); Institute of Statistics of the Republic of Albania (INSTAT); ILO, Labour Statistics database; International Relations Division (IRD); Kuddo, A., 'Employment services and active labour market programs in Eastern European and Central Asian countries'; World Bank working paper No 918 (EAM09), 2009; Labour Force Survey (LFS); Living Standards Measurement Study (LSMS); Ministry of Labour and Social Welfare, Labour and Employment Department, Kosovo (MLSW); Ministry of Education and Science of the Republic of Albania (MES); Ministry of Education, Turkey (METU); Ministry of National Education Statistics (LSES); Montenegro Statistical Office (MONSTAT); Montenegro Statistical Office (2009), Statistical Yearbook 2009, Podgorica (SY); Statistical Office of Kosovo (SOK); Official Gazette of Montenegro, 17/07 (OG); Organisation for Economic Cooperation and Development (OECD); State Indicators (IWB-WDI); World Economic Forum (WEF); Turkish Employment Organisation (ISKUR); United Nations Development Programme (UNDP); UNESCO – Institute for Statistics (UIS); World Bank – World Development



TABLE 3.2 KEY INDICATORS IN THE SOUTHERN AND EASTERN MEDITERRANEAN

	Year	DZ	EG	IL	JO	LB	MA	OPT	SY	TN	EU-27
Population, total (million)	2008	34.4	81.5	7.3	5.9	4.2	31.6	3.9	20.6	10.3	497.7
Dependency rates (as % of working-age population)	2008	47.8	58.7	60.9	63.2	49.5	51.8	92.7	62.7	43.7	48.7
Dependency rates (aged 0–14 as % of working-age population)	2008	41.0	51.5	44.7	57.3	38.6	43.7	87.1	57.5	34.1	23.3
Dependency rates (aged 65+ as % of working-age population)	2008	6.8	7.2	16.2	5.9	10.9	8.1	5.7	5.2	9.6	25.4
Life expectancy, years	2008	72.4	70.1	81.0	72.7	72.0	71.3	73.5	74.2	74.3	79.2 <sup>(2)</sup>
GDP per capita, PPP (current international dollars, 000)	2008	8.0	5.4	27.9	5.5	11.8	4.3	...	4.6	7.9	...
GDP by economic sector (%)											
Agriculture, value added (% of GDP)	2008	8.7	14.0	...	3.6	5.5	16.0	4.8 <sup>(1)</sup>	20.0	10.0	1.8
Industry, value added (% of GDP)	2008	68.7	36.3	...	32.3	22.0	20.0	14.6 <sup>(1)</sup>	35.0	28.4	26.4
Services, etc., value added (% of GDP)	2008	22.6	49.6	...	64.1	72.5	64.0	80.6 <sup>(1)</sup>	45.0	61.6	71.8
Global Competitiveness Index (rank, out of 133)	2009–10	83	70	27	50	...	73	...	94	40	...
Employment rates (% total)	2008	37.6 <sup>(2)(5)</sup>	45.7 <sup>(2)(5)</sup>	58.8 <sup>(1)(5)</sup>	37.9 <sup>(4)</sup>	35.9 <sup>(2)(5)</sup>	48.0 <sup>(1)(6)</sup>	...	40.3 <sup>(1)(4)</sup>	43.1 <sup>(2)(5)</sup>	64.6
Employment rates (% female)	2008	12.0 <sup>(2)(5)</sup>	19.8 <sup>(2)(5)</sup>	55.4 <sup>(1)(5)</sup>	13.3 <sup>(4)</sup>	16.4 <sup>(2)(5)</sup>	24.7 <sup>(1)(6)</sup>	...	2.6 <sup>(1)(4)</sup>	22.5 <sup>(2)(5)</sup>	58.2
Youth unemployment rates (% aged 15–24)	2008	27.4 <sup>(2)</sup>	24.8 <sup>(2)</sup>	14.7 <sup>(1)</sup>	4.8 <sup>(2)</sup>	...	17.9 <sup>(1)</sup>	38.9 <sup>(1)</sup>	16.8 <sup>(1)</sup>	31.4 <sup>(2)</sup>	15.5
Youth unemployment rates (% female aged 15–24)	2008	40.2 <sup>(2)</sup>	47.9 <sup>(2)</sup>	13.9 <sup>(1)</sup>	3.0 <sup>(2)</sup>	...	16.2 <sup>(1)</sup>	46.9 <sup>(1)</sup>	41.7 <sup>(1)</sup>	30.9 <sup>(2)</sup>	15.5
Unemployment rates (% total)	2008	13.8 <sup>(2)(4)</sup>	8.7 <sup>(5)</sup>	7.7 <sup>(1)(5)</sup>	12.7 <sup>(4)</sup>	9.2 <sup>(2)(5)</sup>	...	24.7 <sup>(1)(5)</sup>	8.3 <sup>(1)(4)</sup>	16.9 <sup>(2)(5)</sup>	7.0 <sup>(9)</sup>
Unemployment rates (% female)	2008	18.3 <sup>(2)(4)</sup>	19.3 <sup>(5)</sup>	7.7 <sup>(1)(5)</sup>	24.3 <sup>(4)</sup>	10.2 <sup>(2)(5)</sup>	...	26.6 <sup>(1)(5)</sup>	35.7 <sup>(1)(4)</sup>	21.9 <sup>(2)(5)</sup>	7.5 <sup>(9)</sup>
Participation in lifelong learning (% total aged 25–64)	2008	...	...	8.1	...	...	...	...	...	6.2 <sup>(2)(5)</sup>	9.4
Completion of at least upper secondary education (% total aged 25–64)	2008	29.1 <sup>(2)(4)</sup>	44.5 <sup>(2)(5)</sup>	81.3 <sup>(1)</sup>	...	45.3 <sup>(2)(5)</sup>	...	34.6	...	31.7 <sup>(2)(4)</sup>	71.4
Gross enrolment rate – primary (ISCED 1)	2008	107.5	99.7	110.7	96.8	103.1 <sup>(1)</sup>	106.9	79.6	124.4	107.1	...
Gross enrolment rate – lower secondary (ISCED 2)	2008	23.4	90.1 <sup>(7)(8)</sup>	72.6	94.9	88.6 <sup>(1)</sup>	74.3 <sup>(2)</sup>	92.8	98.0	117.9	...
Gross enrolment rate – upper secondary (ISCED 3)	2008	58.3 <sup>(3)</sup>	68.9 <sup>(7)</sup>	108.0	74.2	75.4 <sup>(1)</sup>	36.7	79.0	34.7	74.2	104.5
Gross enrolment rate – tertiary (ISCED 5+6)	2008	24.0 <sup>(2)</sup>	28.4	59.7	40.7	52.5 <sup>(1)</sup>	12.3	47.2	...	33.7	...
Participation in VET (% of upper secondary)	2008	0.8 <sup>(2)</sup>	61.1	37.3 <sup>(1)</sup>	14.8	27.1	5.2	5.6	21.4	9.8	48.9
Student/teacher ratio in VET (ISCED 3)	2008	20.2 <sup>(7)</sup>	12.4 <sup>(8)</sup>	11.0 <sup>(2)</sup>	10.4 <sup>(2)</sup>	7.7	16.6	16.6	8.0	...	...
Student/teacher ratio in general education (ISCED 3)	2008	...	12.2 <sup>(8)</sup>	...	...	...	...	20.8	...	14.1 <sup>(2)</sup>	...
Private VET (% of total VET) – ISCED 3	2008	...	5.9 <sup>(7)</sup>	...	2.3 <sup>(3)</sup>	56.9	6.4 <sup>(2)</sup>	4.7	5.1 <sup>(2)</sup>	8.8 <sup>(2)</sup>	25.2
Private general education (% of total general education) – ISCED 3	2008	...	8.2 <sup>(7)</sup>	...	10.8 <sup>(3)</sup>	51.6	5.8 <sup>(2)</sup>	4.1	...	...	13.9
Public expenditure on education (% of GDP)	2008	...	3.7	6.2 <sup>(8)</sup>	3.9 <sup>(2)</sup>	2.0	5.5 <sup>(8)</sup>	...	4.9 <sup>(2)</sup>	5.4	5.0 <sup>(2)</sup>

Notes: ... = missing data. (1) 2009. (2) 2007. (3) 2005. (4) Age group 15+. (5) Age group 15–59. (6) Age group 15–64. (7) 2004. (8) 2006. (9) Age group 15–74.

Sources: Central Agency for Public Mobilization and Statistics, Egypt; Central Agency for Public Mobilization and Statistics (2009), Statistical Yearbook, Cairo, Arab Republic of Egypt; Central Agency for Public Mobilization and Statistics (2009), Quarterly Bulletin LFS, third quarter (July–September 2009), Cairo, Arab Republic of Egypt; Central Bureau of Statistics, Syrian Arab Republic (2009), Statistical Yearbook, Damascus; ETF – MEDA Education and Training for Employment database; Haut-Commissariat au Plan, Morocco; ILO (2004), Summary of International Public Employment Services (PES), Administrative Statistics; ILO – Labour Statistics database; International Labour Organization – KILM database; LFS; Ministry of Education, OPT; Ministry of Labour, OPT; National Statistical Institute of the Republic of Tunisia; OECD; Palestinian Central Bureau of Statistics (2010), LFS 2000–2009 Database, Ramallah, OPT; Palestinian Central Bureau of Statistics (2010), Revised Estimate Based on the Final Results of Population, Housing and Establishment Census 2007, Ramallah, OPT; State Statistical Office of Algeria; United Nations Development Programme; UIS; World Bank – World Development Indicators; World Economic Forum.

TABLE 3.3 KEY INDICATORS IN EASTERN EUROPE

	Year	AM	AZ	BY	GE	MD	RU	UA	EU-27
Population, total (million)	2008	3.1	8.9 <sup>(1)</sup>	9.7	4.3	3.6	141.8	46.2	497.7
Dependency rates (% of working-age population)	2008	47.3	41.6 <sup>(1)</sup>	40.2	46.1	39.5	38.9	43.5	48.7
Dependency rates (aged 0–14 as % of working-age population)	2008	30.2	32.1 <sup>(1)</sup>	20.8	25.0	24.0	20.4	20.2	23.3
Dependency rates (aged 65+ as % of working-age population)	2008	17.0	9.6 <sup>(1)</sup>	19.4	21.1	15.5	18.5	23.3	25.4
Life expectancy, years	2008	73.5	70.2	70.6	71.5	68.4	67.8	68.3	79.2 <sup>(9)</sup>
GDP per capita, PPP (current international dollars, 000)	2008	6.1	8.8	12.3	5.0	3.0	15.9	7.3	...
GDP by economic sector (%)									
Agriculture, value added (% of GDP)	2008	18.0 <sup>(1)</sup>	6.0	8.5	10.0	11.0	4.8 <sup>(9)</sup>	7.8	1.8
Industry, value added (% of GDP)	2008	36.0 <sup>(1)</sup>	71.0	38.6	24.0	15.0	38.6 <sup>(9)</sup>	35.5	26.4
Services, etc., value added (% of GDP)	2008	46.0 <sup>(1)</sup>	23.0	52.8	66.0	74.0	56.8 <sup>(9)</sup>	56.7	71.8
Global Competitiveness Index (rank, out of 133)	2009–10	97	51	...	90	...	63	82	...
Employment rates (%), total aged 15–64	2008	52.8	60.0 <sup>(6)</sup>	55.6 <sup>(6)</sup>	52.3 <sup>(6)</sup>	43.0 <sup>(6)</sup>	56.7 <sup>(6)</sup>	59.3 <sup>(17)</sup>	64.6/53.7 <sup>(6)</sup>
Employment rates (%), female aged 15–64	2008	42.4	55.9 <sup>(6)</sup>	54.1 <sup>(6)</sup>	44.9 <sup>(6)</sup>	40.1 <sup>(6)</sup>	51.3 <sup>(6)</sup>	54.0 <sup>(17)</sup>	58.2/46.6 <sup>(6)</sup>
Youth unemployment rates (%), total aged 15–24	2008	57.4	14.0 <sup>(9)</sup>	2.4 <sup>(9)</sup>	35.5	14.4	14.5 <sup>(9)</sup>	13.3	15.5
Youth unemployment rates (%), total aged 25–34	2008	28.3	7.9 <sup>(9)</sup>	1.1 <sup>(9)(8)</sup>	25.9	5.8	...	7.0 <sup>(8)</sup>	...
Youth unemployment rates (%), female aged 15–24	2008	67.5	10.5 <sup>(9)</sup>	3.3 <sup>(9)</sup>	40.7	12.4	14.7 <sup>(9)</sup>	13.6	15.5
Youth unemployment rates (%), female aged 25–34	2008	38.7	7.3 <sup>(9)</sup>	1.4 <sup>(9)(8)</sup>	28.2	3.7	...	7.1 <sup>(8)</sup>	...
Unemployment rates (%), total aged 15+	2008	29.4 <sup>(2)</sup>	6.6 <sup>(2)(9)</sup>	1.1 <sup>(9)</sup>	16.5	4.0	6.3 <sup>(15)</sup>	6.4 <sup>(17)</sup>	7.0 <sup>(18)</sup>
Unemployment rates (%), female aged 15+	2008	36.4 <sup>(2)</sup>	5.3 <sup>(2)(9)</sup>	1.3 <sup>(1)(9)</sup>	16.1	3.4	6.1 <sup>(15)</sup>	6.1 <sup>(17)</sup>	7.5 <sup>(18)</sup>
Participation in lifelong learning (%), total aged 25–64	2008	...	...	...	...	...	...	...	9.4
Completion of at least upper secondary education (%), total aged 25–64	2008	88.1 <sup>(3)</sup>	88.6 <sup>(9)</sup>	85.8 <sup>(10)</sup>	89.5 <sup>(11)</sup>	82.6	88.0 <sup>(11)</sup>	89.7 <sup>(9)</sup>	71.4
Gross enrolment rate – primary (ISCED 1)	2008	105.1	116.2	99.2	107.4	94.0	96.8	98.4	...
Gross enrolment rate – lower secondary (ISCED 2)	2008	94.8	100.9	113.5	90.4	90.1	85.2	95.9	...
Gross enrolment rate – upper secondary (ISCED 3)	2008	74.8	115.7	72.3 <sup>(9)</sup>	89.5	82.8	84.2	91.5	104.5
Gross enrolment rate – tertiary (ISCED 5+6)	2008	34.2 <sup>(9)</sup>	15.8	72.8	34.3	40.0	77.2	79.4	...
Participation in VET (% of upper secondary)	2008	3.3	38.4	2.6	1.2	34.5	47.0	24.9	48.9
Student/teacher ratio in VET (ISCED 3)	2008	7.3 <sup>(4)</sup>	12.3 <sup>(7)</sup>	...	...	12.1 <sup>(13)</sup>	...	...	...
Student/teacher ratio in general education (ISCED 3)	2008	...	...	...	7.8 <sup>(4)</sup>	...	...	...	...
Private VET (% of total VET) – ISCED 3	2008	...	80.8	...	27.1 <sup>(4)</sup>	2.1 <sup>(14)</sup>	1.5 <sup>(9)</sup>	0.5 <sup>(18)</sup>	25.2
Private general education (% of total general education) – ISCED 3	2008	1.4 <sup>(4)</sup>	0.5	...	6.4 <sup>(4)</sup>	0.6 <sup>(9)</sup>	0.6 <sup>(9)</sup>	...	13.9
Public expenditure on education (% of GDP)	2008	2.8 <sup>(5)</sup>	2.7 <sup>(9)</sup>	5.8 <sup>(9)</sup>	3.0 <sup>(12)</sup>	8.2	3.9 <sup>(16)</sup>	5.3 <sup>(9)</sup>	5.0 <sup>(9)</sup>

Notes: ... = missing data. (1) 2009. (2) Age group 15–64. (3) 2000. (4) 2008/09. (5) 2006/07. (6) Age group 15+. (7) Total VET. (8) Age group 25–29. (9) 2007. (10) 1999; education levels included are 'higher', 'secondary vocational', 'primary vocational' and 'secondary general' education. (11) 2002. (12) 2004/05. (13) 2007/08; total ISCED 3 considered. (14) 2007; total ISCED 3 considered. (15) Age group 15–70. (16) 2006. (17) Age group 15–70. (18) Total ISCED 3. (19) Age group 15–74.

Sources: Federal State Statistics Service of Russia; ILO – Labour Statistics database; Kuddo, A., 'Employment services and active labour market programs in Eastern European and Central Asian countries', Social protection and labour discussion paper, No 918, World Bank, 2009; LFS; Ministry of Education and Science of Georgia; Ministry of Finance of Armenia; Ministry of Finance of Azerbaijan; Ministry of Finance of Moldova; National accounts of Moldova; National Bureau of Statistics of Moldova; National statistical committee of the Republic of Belarus (2000–01, 2004, 2006 and 2008). Labor and employment in Belarus. Minsk: National statistical committee of the Republic of Belarus (2000–01, 2004, 2006 and 2008). Labor and employment in Belarus. Minsk: National Statistical Service of Georgia; National Statistics Office of Armenia; OECD; State employment agency of the Republic of Armenia; Statistical office of Belarus (2009). Statistical yearbook, Minsk 2009; State Statistics Committee of Ukraine; State Statistical Office of Azerbaijan; State Statistical Office of Belarus; United Nations Development Programme; UNECE Statistical Division Database; UIS; World Bank – World Development Indicators; World Economic Forum.

TABLE 3.4 KEY INDICATORS IN CENTRAL ASIA

	Year	KZ	KG	TJ	TM	UZ	EU-27
Population, total (million)	2008	15.7	5.3	6.8	5.0	27.3	497.7
Dependency rates (% of working-age population)	2008	45.0	54.1	70.2	52.5	53.0	48.7
Dependency rates (aged 0–14 as % of working-age population)	2008	34.3	45.8	63.9	45.9	46.0	23.3
Dependency rates (aged 65+ as % of working-age population)	2008	10.7	8.3	6.3	6.6	7.0	25.4
Life expectancy, years	2008	66.4	67.4	66.7	64.8	67.8	79.2 <sup>(11)</sup>
GDP per capita, PPP (current international dollars, 000)	2008	11.3	2.2	1.9	6.6	2.7	...
GDP by economic sector (%)							
Agriculture, value added (% of GDP)	2008	6.2	29.8	18.1	12.3	21.4	1.8
Industry, value added (% of GDP)	2008	41.9	19.7	22.9	53.7	30.8	26.4
Services, etc., value added (% of GDP)	2008	51.9	50.6	59.0	34.0	47.9	71.8
Global Competitiveness Index (rank, out of 133)	2009–10	67	123	122	...	...	...
Employment rates (% total aged 15–64)	2008	66.4 <sup>(2)</sup>	60 <sup>(2)</sup>	55.4 <sup>(2)</sup>	58.3 <sup>(2)</sup>	57.5 <sup>(2)</sup>	53.7 <sup>(2)</sup>
Employment rates (% female aged 15–64)	2008	61.4 <sup>(2)</sup>	49.7 <sup>(2)</sup>	50.7 <sup>(2)</sup>	53.7 <sup>(2)</sup>	52.5 <sup>(2)</sup>	46.6 <sup>(2)</sup>
Youth unemployment rates (% total aged 15–24)	2008	7.4	11.0 <sup>(4)</sup>	...	...	...	15.5
Youth unemployment rates (% total aged 25–34)	2008	...	...	...	...	...	...
Youth unemployment rates (% female aged 15–24)	2008	8.2	...	...	...	...	15.5
Youth unemployment rates (% female aged 25–34)	2008	...	...	...	...	...	...
Unemployment rates (% total aged 15+)	2008	6.6	8.2	7.4 <sup>(8)</sup>	...	...	7.0 <sup>(1)</sup>
Unemployment rates (% female aged 15+)	2008	7.9	9.4	8.5 <sup>(8)</sup>	...	...	7.5 <sup>(1)</sup>
Participation in lifelong learning (% total aged 25–64 years)	2008	...	...	...	...	...	9.4
Completion of at least upper secondary education (% total aged 25–64)	2008	94.0 <sup>(3)</sup>	...	68.5 <sup>(9)</sup>	...	...	71.4
Gross enrolment rate – primary (ISCED 1)	2008	108.5	94.7	102.2	...	92.8	...
Gross enrolment rate – lower secondary (ISCED 2)	2008	104.3	92.3	94.8	...	96.4	...
Gross enrolment rate – upper secondary (ISCED 3)	2008	66.1	67.9	58.8	...	113.5	104.5
Gross enrolment rate – tertiary (ISCED 5+6)	2008	46.9	52.0	20.2	...	9.9	...
Participation in VET (% of upper secondary)	2008	26.0	13.0	10.2	...	81.0	48.9
Student/teacher ratios in VET (ISCED 3)	2008	...	9.0 <sup>(6)</sup>	7.0 <sup>(10)</sup>	...	...	...
Student/teacher ratios in general education (ISCED 3)	2008	...	16.0 <sup>(7)</sup>	17.0 <sup>(10)</sup>	...	...	...
Private VET (% of total VET) – ISCED 3	2008	2.7	...	...	...	...	25.2
Private general education (% of total general education) – ISCED 3	2008	0.9	2.0	...	...	...	13.9
Public expenditure on education (% of GDP)	2008	4.0	5.2	3.5	...	...	5.0 <sup>(11)</sup>

Notes: ... = missing data. (1) Age group 15–74. (2) Age group 15+. (3) 2004; age group 15+. (4) Age group 15+. (5) 2007. (6) 2008/09; initial VET considered. (7) 2008/09; total secondary general education (classes 5–11) considered. (8) 2004; age group 15–70. (9) The percentage is the sum of secondary education general, secondary education technical and higher education; 2007; age group 15+. (10) Total secondary (no difference between lower and upper secondary education – ISCED 2 and 3).

Sources: ILO – Labour Statistics database; ILO – KILIM database; LFS; National Statistical Committee of the Kyrgyz Republic; NSC; 'Women and men of the Kyrgyz Republic', Bishkek, 2009; OECD; Samsayev, I.M., 'Legal review and institutional set up of TVET in Kazakhstan', ETF paper, Almaty, 2009; State Committee on Statistics of Tajikistan; Tajikistan Living Standard Survey; The Agency of statistics of the Republic of Kazakhstan; The Agency of statistics of the Republic of Kazakhstan (2010); Economic activity of Kazakhstan population 2005–2009, Astana city; UNDP; 'Education in Uzbekistan: Matching Supply and Demand', Tashkent, 2007/2008; UNDP; UIS; World Bank – World Development Indicators; World Economic Forum.



## 4. CONCLUSIONS AND FUTURE STEPS

The trends and the data availability across the four regions vary greatly. This means that comparisons between countries within a region are possible as regional characteristics can be taken into account, but there is a risk that comparisons made across the regions will be bland. The most fruitful course of action is therefore to continue to gather key indicators at a regional level and to conduct analysis at the same level. In regions where there is more data available and where more sophisticated indicators can be collected, such as the Western Balkans and Turkey, more extensive sets of key indicators can be collected in future years. ETF projects in that region already routinely use more indicators than can be reliably collected in the other regions. This allows for a more in-depth analysis of education and training and labour market issues in the Western Balkans and Turkey than in the other regions, and future Key Indicator publications will take advantage of this fact.

The technical annex to this document outlines the coverage and compliance of all the ETF key indicators. Gaps exist in all countries and it is important for all countries to continue to improve existing data collections, so that policy making can be based to a greater extent on the use of evidence, both quantitative and qualitative. A policy dialogue to broaden the evidence base will be introduced by the ETF in 2011 under an initiative named Torinet. The intention is to start with a first wave of eleven countries from all the four main regions in which the ETF operates, and to extend activities to all interested partner countries in successive phases. Over the coming years, this policy dialogue is intended to lead to improvements in both the reliability and the coverage of indicators. The lessons that have been learnt from the 2010 Key Indicators project, and that are presented here, will be an important part of the basis for discussions between the ETF and national authorities concerning the most appropriate tools for policy dialogue.

The ETF is currently actively outlining existing and developing new TVET indicators through an Inter-agency Working Group. The working group counts the ILO, UNESCO and the UIS, the Asian Development Bank and the World Bank among its members, along with representatives from the wider donor and research communities. One outcome is expected to be a minimum set of indicators that can be used by national policy-makers to monitor trends and developments within education and training systems. The initiative is also expected to inform the international response to the request from the G20 Summit in Seoul that called for 'internationally comparable skills indicators... to serve as a monitoring tool for assessing employable skills development in low-income countries'.

Future ETF Key Indicator collections will consider adopting recommendations from the Inter-agency Working Group on TVET indicators and will test the applicability of the recommendations through ETF data collections. Although efforts will be made to ensure the creation of a stable core list of ETF key indicators, incremental changes must be expected from year to year in order to accommodate changes in interest and political emphasis.

# ANNEXES

## ANNEX 1. LIST OF KEY INDICATORS 2010

Indicator	Abbreviation
Activity rates by education level, age and gender (%)	<b>ACT.1</b>
<i>Activity rates by education level and gender (%)</i>	<b>ACT.1.1</b>
<i>Activity rates by age and gender (%)</i>	<b>ACT.1.2</b>
Employment rates by education level and gender (%)	<b>EM.1</b>
Employment rates of older workers (55–64) by gender (%)	<b>EM.2</b>
Employment by employment status and gender	<b>EM.3</b>
Employment by economic sector	<b>EM.4</b>
Unemployment rates by education level and gender (%)	<b>UN.1</b>
Youth unemployment rates (15–24 and 25–34) by education level and gender (%)	<b>UN.2</b>
Education attainment of population (15+) by age and gender	<b>ATT.1</b>
Education attainment of population (15+) by rural/urban	<b>ATT.2</b>
Education attainment of population (15+) by income group	<b>ATT.3</b>
Illiteracy/literacy rates by gender (%)	<b>ILL.1</b>
Percentage of 25–64- and 25–34-year-olds having participated in lifelong learning by gender (%)	<b>LLL.1</b>
Participation in lifelong learning by education level and gender	<b>LLL.2</b>
Total number of enrolled pupils/students by education level, programme (VET and general) and gender	<b>ENR.1</b>
Private education as % of total by education level and programme (VET and general)	<b>PRI.1</b>
Gross enrolment rates by education level, programme (VET and general) and gender (%)	<b>ENR.2</b>
Participation in VET in % by field of study	<b>ENR.3</b>
Percentage of apprentices in the VET system by gender and education level	<b>APP.1</b>
Drop-out rates in upper secondary (general and VET) by gender (%)	<b>DRO.1</b>
Gross completion rate by education level and programme (VET and general) (%)	<b>COM.1</b>
Percentage of VET pupils who continue to higher levels of education	<b>CON.1</b>
Graduates in mathematics, science and technology as % of total graduates (ISCED 5+6)	<b>GRA.1</b>
Public expenditure on education by education level and programme (VET and general) as % of GDP, public expenditure and total educational expenditure	<b>EXP.1</b>
<i>Public expenditure on education by education level and programme (VET and general) as % of GDP</i>	<b>EXP.1.1</b>
<i>Public expenditure on education by education level and programme (VET and general) as % of public expenditure</i>	<b>EXP.1.2</b>
<i>Public expenditure on education by education level and programme (VET and general) as % of total educational expenditure</i>	<b>EXP.1.3</b>
Cost per pupil by programme (VET and general) in ISCED 3	<b>EXP.2</b>
Student/teacher ratios by education level and programme (VET and general)	<b>TEA.1</b>
Share of teachers in teacher training per year by gender (%)	<b>TEA.2</b>
Teacher salaries as % of average wage	<b>TEA.3</b>
Expenditure on active labour market policies (ALMPs) as % of GDP and public expenditure	<b>PES.1</b>
<i>Expenditure on active labour market policies (ALMPs) as % of GDP</i>	<b>PES.1.1</b>
<i>Expenditure on active labour market policies (ALMPs) as % of public expenditure</i>	<b>PES.1.2</b>
Percentage of registered unemployed population covered by ALMPs	<b>PES.2</b>
Registered unemployed population by education level, age and gender	<b>PES.3</b>
Number of staff of public employment services (PESs)	<b>PES.4</b>
Number of vacancies	<b>PES.5</b>
GDP by economic sector (%)	<b>ADD.1</b>
GDP per capita, PPP (current international dollars, 000)	<b>ADD.2</b>
Dependency rates (%)	<b>ADD.3</b>
Mean score of student performance on the reading scale (PISA)	<b>ADD.4</b>
Human Development Index	<b>ADD.5</b>
Global Competitiveness Index	<b>ADD.6</b>
Doing Business Index	<b>ADD.7</b>

## ANNEX 2. DEFINITION OF SELECTED INDICATORS

Definition	Indicator
The <b>activity rate</b> represents the labour force as a percentage of the working-age population (15–64 years). The labour force comprises persons in employment and unemployed persons.	<b>ACT.1</b>
The <b>employment rate</b> represents persons in employment as a percentage of the working-age population (15–64 years).	<b>EM.1</b>
The <b>employment rate of older workers</b> represent persons aged 55–64 in employment as a percentage of the population of working age 55–64.	<b>EM.2</b>
<b>Status in employment</b> refers to the status of an economically active person with respect to his or her employment, that is, the type of explicit or implicit contract of employment with other persons or organisations that the person has in his/her job.	<b>EM.3</b>
It is recommended that the economically active population should be classified by status in employment as follows: <ul style="list-style-type: none"> <li>• employees, among whom it may be possible to distinguish between employees with stable contracts (including regular employees) and other employees;</li> <li>• employers;</li> <li>• own-account workers;</li> <li>• contributing family workers;</li> <li>• members of producers' co-operatives;</li> <li>• persons not classifiable by status.</li> </ul>	
The <b>unemployment rate</b> represents unemployed persons as a percentage of the labour force (15+).	<b>UN.1</b>
The <b>youth unemployment rate</b> refers to unemployed persons aged 15–24 (25–34) as a percentage of the labour force aged 15–24 (25–34).	<b>UN.2</b>
<b>Education attainment</b> is defined as the highest grade completed within the most advanced level attended in the education system of the country where the education was received.	<b>ATT.1</b>
The <b>illiteracy rate</b> refers to the percentage of the population aged 15 years and over who cannot both read and write with understanding a short, simple statement on his/her everyday life.	<b>ILL.1</b>
The <b>literacy rate</b> refers to the percentage of the population aged 15 years and over who can both read and write with understanding a short, simple statement on his/her everyday life.	
<b>Lifelong learning</b> is defined as encompassing 'all learning activity undertaken throughout life, with the aim of improving knowledge, skills and competences, within a personal, civic, social and or employment-related perspective'. Here it is understood to mean that an individual has participated in training in the four-week reference period prior to the interview (it is assumed that data will come from LFSs or similar).	<b>LLL.1</b>
The <b>gross enrolment rate</b> is the total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school year. As the calculation of gross enrolment rate takes into account under-age and over-age students, it tends to be higher than net enrolment rate. Moreover, it can be higher than 100%.	<b>ENR.1</b>
The <b>net enrolment rate</b> is the enrolment of the official age group for a given level of education expressed as a percentage of the corresponding population.	
<b>Apprenticeship</b> or training contracts of fixed duration are the contracts drawn up between the employer and the apprentice/trainee in order to enable the apprentice to acquire practical experience in a specific field.	<b>APP.1</b>
The <b>drop-out rate</b> is the proportion of pupils/students from a cohort enrolled in a given level at a given school year who are no longer enrolled in the following school year.	<b>DRO.1</b>
The <b>completion rate</b> is defined as all graduates in a given level expressed as a percentage of the number of students starting X years prior, where X is the theoretical duration of the education level.	<b>COM.1</b>
<b>Student/teacher ratio</b> refers to the average number of pupils (students) per teacher at a specific level of education in a given school year.	<b>TEA.1</b>
<b>Active labour market policies (ALMPs)</b> include all social expenditure (other than education) that is aimed at the improvement of the beneficiaries' prospect of finding gainful employment or to otherwise increase their earnings capacity. This category includes spending on PESs and administration, labour market training, special programmes for young people when in transition from school to work, labour market programmes to provide or promote employment for unemployed and other persons (excluding young people and those with disabilities) and special programmes for individuals with disabilities.	<b>PES.1</b>
<b>PPP GDP</b> is gross domestic product converted to international dollars using purchasing power parity rates. An <b>international dollar</b> has the same purchasing power over GDP as the US dollar has in the United States. <b>GDP</b> at purchaser's prices is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. (World Bank, World Development Indicators)	<b>ADD.2</b>
The <b>total dependency rate</b> refers to the number of persons under age 15 plus the number of persons aged 65 or older for every 100 persons aged 15–64.	<b>ADD.3</b>
The <b>child dependency rate</b> refers to the number of persons under age 15 for every 100 persons aged 15–64.	
The <b>aged dependency rate</b> refers to the number of persons aged 65 or older for every 100 persons aged 15–64.	

# ABBREVIATIONS AND ACRONYMS

<b>ALMPs</b>	Active labour market policies
<b>ETF</b>	European Training Foundation
<b>EU</b>	European Union
<b>GDP</b>	Gross domestic product
<b>ILO</b>	International Labour Organisation
<b>ISCED</b>	International Standard Classification of Education
<b>LFS</b>	Labour force survey
<b>OECD</b>	Organisation for Economic Cooperation and Development
<b>PES</b>	Public employment service
<b>PISA</b>	Programme for International Student Assessment
<b>PPP</b>	Purchasing power parity
<b>TVET</b>	Technical and vocational education and training
<b>UIS</b>	UNESCO Institute for Statistics
<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organisation
<b>UNSCR</b>	United Nations Security Council Resolution
<b>VET</b>	Vocational education and training

## COUNTRY CODES

<b>AL</b>	Albania
<b>AM</b>	Armenia
<b>AZ</b>	Azerbaijan
<b>BA</b>	Bosnia and Herzegovina
<b>BY</b>	Belarus
<b>DZ</b>	Algeria
<b>EG</b>	Egypt
<b>GE</b>	Georgia
<b>HR</b>	Croatia
<b>IL</b>	Israel
<b>JO</b>	Jordan

<b>KG</b>	Kyrgyzstan
<b>KZ</b>	Kazakhstan
<b>LB</b>	Lebanon
<b>MA</b>	Morocco
<b>MD</b>	Republic of Moldova
<b>ME</b>	Montenegro
<b>MK<sup>9</sup></b>	Former Yugoslav Republic of Macedonia
<b>OPT<sup>9</sup></b>	Occupied Palestinian territory
<b>RS</b>	Serbia
<b>RU</b>	Russian Federation
<b>SY</b>	Syria
<b>TJ</b>	Tajikistan
<b>TM</b>	Turkmenistan
<b>TN</b>	Tunisia
<b>TR</b>	Turkey
<b>UA</b>	Ukraine
<b>UZ</b>	Uzbekistan
<b>XK<sup>9</sup></b>	Kosovo (under UNSCR 1244/1999)

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<sup>9</sup> The two-letter codes for the former Yugoslav Republic of Macedonia, Kosovo and the occupied Palestinian territory are yet to be defined. The provisional code MK does not affect the definitive denomination of the country to be attributed after the conclusion of the negotiations currently taking place in the United Nations. XK is the provisional code used by Eurostat, and OPT is commonly used in European Commission documents.





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