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## **THE RECENT ECONOMIC CRISIS AND YOUTH UNEMPLOYMENT IN MACEDONIA**

### **Abstract**

Macedonia as a less developed post-transition country during the past decade struggles with high and sustained unemployment, human capital depreciation and striking labour market segmentation. A general perception is that young population that enters the labour force faces higher risk of becoming or remaining unemployed. The main reason for high unemployment among young workers is a lack of skills and work experience which make them less competitive on the labour market compared to prime-age and more mature workers. Moreover, the formal education and training systems often have been ineffective at easing the transition from school to work or slow to adapt to the changing requirements arising from the rapidly changing industrial structure. Among other factors that might cause higher incidence of youth unemployment are some labour market institutions such as minimum wages and unemployment benefits. The problem of youth unemployment is often related to the role of the family at providing income support particularly in more traditional and collectivist societies. Finally, the unemployment among young population is highly cyclical sensitive, which means that youth are particularly hard hit in a recession which has been confirmed by the recent global economic crisis and its adverse effects on the demand for labour.

In this paper we will make an attempt to identify the impact of recent economic crisis on the youth unemployed in Macedonia. For this purpose we will use results from the survey carried out on a representative sample of registered unemployed workers. In this context, we will estimate econometric models that as a support in the process of identification of potentially relevant factors such as: personal perceptions, the role of alternative labour market adjustment mechanisms and the treatment of unemployed by the policy measures. As a result we will depict the profile of the youth unemployed workers in Macedonia and will assess to what extent they differentiate from more mature workers. Finally, we will formulate appropriate policy recommendations that target youth as disadvantaged labour market segment in order to improve their future employment prospects.

**Key words:** Labour market, segmentation, youth, unemployment, economic crisis.

## Introduction

Macedonia as a less developed post-transition country during the past decades struggles with high and sustained unemployment, human capital depreciation and striking labour market segmentation. The general trends in the Macedonian labour market in a number of aspects resemble those typical of the transitional world. However, the Macedonian labour market shares some features which are peculiar to Western Balkan countries (WBCs). This is particularly relevant regarding the evolution of unemployment rate that sharply rose at the beginning of transition and has thereafter remained stagnant, reflecting the depressed characteristics of Macedonian labour market. Long spells of unemployment often lead to the degradation and dehumanisation of individuals in society, causing social exclusion and increasing the burden for the government of providing the necessary safety net. Consequently, the problem of unemployment is not only a personal problem for the people who experience it, but it has become a problem for the economy as a whole.

A general perception is that young population that enters the labour force faces higher risk of becoming or remaining unemployed. The main reason for high unemployment among young workers is a lack of skills and work experience which make them less competitive on the labour market compared to prime-age and more mature workers. Moreover, the formal education and training systems often have been ineffective at easing the transition from school to work or slow to adapt to the changing requirements arising from the rapidly changing industrial structure. Among other factors that might cause higher incidence of youth unemployment are some labour market institutions such as minimum wages and unemployment benefits. The problem of youth unemployment is often related to the role of the family at providing income support, particularly in more traditional and collectivist societies. Finally, the unemployment among young population is highly cyclical sensitive, which means that youth are particularly hard hit in a recession which has been confirmed by the recent global economic crisis and its adverse effects on the demand for labour.

Hence, youth needs to be offered the right chances, which makes adequate opportunities for education all the more important, as they are vital for growth, employment and prosperity. Therefore, the issue of youth unemployment remains as one of the highest priorities of the governments all around the world including WBCs. In this context, on the last Western Balkans Summit it has been pointed out that “Improving the perspectives of young generations is of paramount importance in ensuring stability, sustainable development and progress of the region” (Final Declaration by the Chair of the Vienna Western Balkans Summit, 27 August 2015). Furthermore, the participating states have underlined the need to enhance youth mobility between the EU and the region and in the region itself. In addition, the participating States have agreed to continue with the work on the basis of the “Positive agenda for the Youth in the Western Balkans”, which was launched at the Foreign Ministers Meeting in Brdo in April 2015 and noted with satisfaction the progress that was already achieved in developing concrete proposals and ideas, welcoming the proposal of the European Commission to organise an Enlargement Conference in the first half of 2016 focusing on youth issues.

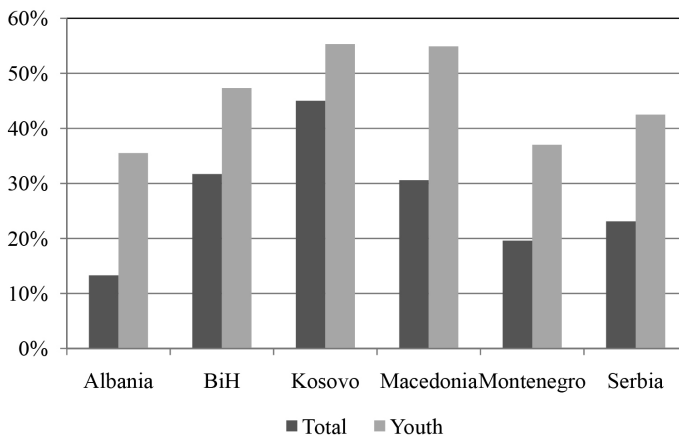
Having in mind the importance of the problem of youth unemployment, in this paper we make an attempt to identify the impact of recent economic crisis on the youth unemployed in Macedonia. For this purpose we use results from the survey carried out on a representative sample of registered unemployed workers. The paper is structured as

follows. After introductory note, in the second part we present the theoretical framework about the youth on the labour market. In the empirical part we estimate econometric models as a support in the process of identification of potentially relevant factors such as: personal perceptions, the role of alternative labour market adjustment mechanisms and the treatment of unemployed by the policy measures. As a result we depict the profile of the youth unemployed workers in Macedonia and analyse to what extent they differentiate from more mature workers. Finally, we formulate appropriate policy recommendations that target youth as disadvantaged labour market segment in order to improve their future employment prospects.

## Theoretical background

The justification for analysing youth unemployment is based upon the theoretical framework commonly known as labour market segmentation theory. In the labour market context, the segmentation means that we can distinguish different segments where demand and supply for labour in each segment adjust independently from the other segments. In other words, in the case of labour segmentation the established rules of behaviour of the labour market actors in each segment are different from those in other segments. According to this theory, the labour market segments to some extent can operate independently because jobs and workers in each segment match according to particular conditions on the demand and supply side (Cain, 1976). The transition has created increased preconditions for segmentation of the society that affected the functioning of the labour markets (Nikoloski, 2009). In these circumstances, as particularly concerned can be distinguished specific demographic segments such as: youth, some ethnic minorities (for example Roma), and less skilled workers. The increased risk of unemployment and/or non-participation among these segments than the rest of the labour force has enormous social implications such as rising poverty and income inequality.

**Figure 1.** Unemployment rates in Western Balkan countries



For employment and unemployment purposes, as “youth” are generally considered people from the age when mandatory schooling ends through age 24. For most coun-

tries, that means the time span from 15 years old through 24 years old. A general rule of thumb is that young population that enters the labour force face higher risk of becoming unemployed. The empirical evidence shows that even in most developed countries the youth unemployment rates are approximately twice the adult rates (OECD, 2011). High youth unemployment is a characteristic of almost all transition countries (Blanchflower, 2001; Cazes and Nesporova, 2003). The situation in less developed regions such as Western Balkans with respect to youth unemployment is even worse. For instance, the average youth unemployment rate in WBCs economies remains 2.5 times higher than the EU average and 3 times higher than the adult unemployment rate (La Cava et al., 2006). The situation of youth unemployment rates in WBCs compared to total unemployment rates in 2012 are presented in Figure 1.

Generally, the main reason for higher unemployment among young workers is a lack of skills and work experience which make them less competitive on the labour market compared to prime-age and more mature workers. Moreover, the formal education and training systems often have been ineffective at easing the transition from school to work or slow to adapt to the changing requirements arising from the rapidly changing industrial structure (O'Higgins, 2010). Among other factors that might cause higher incidence of youth unemployment are some labour market institutions such as: minimum wages and unemployment benefits. In this context, Rutkowski (2006) points out that high fraction of young labour market entrants among the unemployed in transition countries can be partly attributed to the legacies of the old system such as the high degree of job protection granted to incumbent workers. The problem of youth unemployment is often related to the role of the family at providing income support particularly in more traditional and collectivist societies. Finally, the unemployment among young population is highly cyclical sensitive, which means that youth are particularly hard hit in a recession. This has been confirmed by the recent global economic crisis and its adverse effects on the demand for labour (Bell and Blanchflower, 2010).

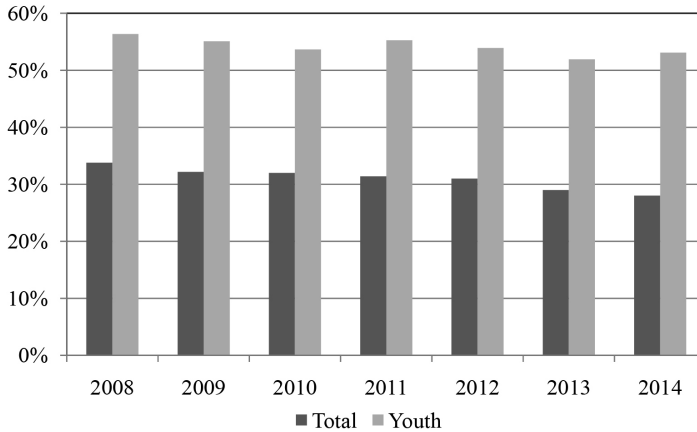
The persistence of high youth unemployment rates exerts long-term scarring effects on the adult workforce of the next generations (Blanchflower and Oswald, 2007). The youth unemployment and particularly long-term unemployment causes increased probability of engagement in risk-taking practices such as violent behaviour and excessive alcohol and drug use. Moreover, due to the low employment prospects, young workers are more likely resort to various alternative labour market adjustment mechanisms such as informal work and emigration. Namely, given high unemployment in WBCs, many youth have left their countries to look for jobs abroad, which has been considered as a source of brain drain and lost investment in education in the home country. In sum, high youth unemployment rates have negative impact on the economic growth prospects in developing countries.

## **Empirical analysis**

In the context of the previously elaborated theoretical framework we can argue that youth in Macedonia represent a marginalised labour market segment. The unfavourable labour market conditions that experience youth workforce can be illustrated by the high unemployment rates. For instance, the unemployment rate of the youth (age group from 15 to 24 years) in 2014 was 53.1%, which is considerably higher than the average unemployment rate (28%). The total and youth unemployment rates according to the data from

the Macedonian Labour Force Survey for the period from 2008 to 2014 are presented on Figure 2.

**Figure 2.** Unemployment rates in Macedonia (2008-2014)



From Figure 2 we can notice that unemployment rate in Macedonia during the period from 2008 to 2014 marks continuous decline from 34% to 28%. However, it is obvious that the youth unemployment rate during the same period does not show declining trend and hovers between 51% and 56%. Thus, the causes and the nature of considerably high youth unemployment rate in Macedonian during the economic crisis represent a challenging task for further investigation. Having in mind that there is a lack of consistent cross-section data regarding these issues, we have designed and carried out a survey based on a sample of registered unemployed workers. The survey was conducted during a reference period from mid October to mid November 2011, whereas the sample consisted of 2300 unemployed workers selected randomly in each of 30 branch offices of the Employment Service Agency (ESA) all over the country. Due to the lack of exhaustive lists of registered unemployed that are confidential, the interviewers had freedom to choose eligible respondents randomly. The survey was traditionally conducted in a pen and paper format by using self-administered questionnaires. Having in mind the special topic of the survey, its weakness is viewed in the fact that it cannot be used to monitor changes over time. The structure of the sample according to the basic demographic characteristics is given in Table 1.

**Table 1.** The structure of the sample according to various demographic characteristics

Gender		Place of living		Age	
Male	50.30%	Urban	77.89%	15-20	4.09%
Female	49.70%	Rural	22.11%	21-25	23.27%
Education		Ethnicity		26-30	19.23%
Primary or less	15.11%	Macedonian	81.80%	31-35	11.70%
Secondary	50.35%	Albanian	10.21%	36-40	10.61%
Higher	34.54%	Turk	2.26%	41-45	10.61%
Marital status		Roma	2.26%	46-50	8.96%
Single	40.43%	Serbian	1.95%	51-55	6.92%
Married	53.66%	Vlahos	1.00%	56-60	<b>3.61%</b>
Divorced	3.74%	Bosnian	0.35%	61-65	0.87%
Widowed	2.18%	Other	0.17%	65 and more	0.13%

**Source:** Authors' calculations

In order to assess the profile of the unemployed workers including the youth, we have designed a questionnaire which consists of 53 questions. Most of the questions are close-ended with multiple choices, i.e. they are accompanied by a range of answers from which the respondent is asked to indicate which answer best applies to him. Only two questions are open ended in order to get personal opinion from the respondent about the feeling of being unemployed and his intentions in order to get employed. Alongside the questions about the various economic activities or sources of income we attempted to assess the adjustment mechanisms indirectly by using the time allocation to various activities as well as personal values and perceptions.

When it comes to identify the differences between youth and mature workers with respect to their perceptions of the economic crisis, we further attempt to assess the major dividing lines among these two categories. For this purpose we divide the sample into two sub samples and estimate proportions of youth and mature workers who have affirmative attitudes regarding the impact of the crisis. At the first place we are interested in the impact on the subjective well-being of unemployed workers assessed through the levels of stress, living standard and perception of future labour market prospects, the role of the alternative labour market adjustment mechanisms such as emigration and employment in the informal sector and the treatment by the labour market policy measures. The major dividing lines between youth and mature unemployed workers are presented in Table 2.

**Table 2.** The major dividing lines between youth and mature unemployed workers

Dividing line	Youth	Mature
Unemployment causes stress and/or other health problems	68.9%	87.1%
The global economic crisis has negatively influenced the living standard of the household	54.2%	61.7%
Perceives himself as still unemployed after five years	3.1%	18.6%
Actively search for job	51.2%	51.2%
If has possibility would work abroad	71.1%	58.6%
Earn income from informal economic activities	26.6%	41.8%
Receive unemployment benefit	2.8%	10.2%
Participate in active labour market programmes	9.2%	10.1%

**Source:** Authors' calculations

From Table 2 we can notice that unemployment has caused more stress for mature than for youth workers. Similarly, the mature unemployed workers seem to be more concerned by the negative effects of the crisis on their living standard and are more discouraged about their future labour market prospects compared to youth unemployed. In contrast, youth unemployed manifest greater intention to emigrate in order to find work abroad while their involvement in the informal sector is lower compared to mature workers. Finally, the coverage of youth unemployed by the passive labour market policies is lower compared to mature workers, while this gap is closer with respect to the coverage by the active labour market policies.

In order to assess the impact of recent economic crisis upon the youth unemployed workers in Macedonia, furthermore we estimate several Logit models. The specification of the Logit model is as follows:

$$\text{logit}(E[Y_i | X_i]) = \text{logit}(p_i) = \ln\left(\frac{p_i}{1-p_i}\right) = \beta_0 + \beta_1 x_{1,i} + \dots + \beta_m x_{m,i}$$

where,  $Y_i$  is dependent variable which takes value 1 with probability  $p_i$ , and value 0 with probability  $1-p_i$ . In this context, we separately estimate three models aiming to assess the factors that influence: first, the probability that unemployment causes stress and/or other health problems; second, probability to perceive as unemployed after 5 years and third, probability that the economic crisis has influenced the living standard of the respondent's household.

On the other hand,  $X_i$  is a vector of independent variables whose effect on the dependent variable is assessed by the estimated coefficients. We divide the possible determinants in three groups: Personal traits, household characteristics and policy treatment variables. The results from the estimation of the first Logit model are presented in Table 3.

**Table 3.** Estimated Logit model for unemployment as a cause of stress and/or other health problems

Variables	Coefficient	Standard error	t-value	Diff. in odd ratio
Intercept	-1.1625	1.7331	-0.6707	
<b>Personal traits</b>				
Male	-0.3027	0.2253	-1.3434	
Married	-0.1796	0.4034	-0.4452	
Urban	-0.1489	0.2684	-0.5546	
Higher education	0.8600	0.2771	3.1027***	136.3%
Long-term unemployed	1.0251	0.2402	4.2673***	178.7%
Actively search for job	0.7073	0.3077	2.2985**	102.9%
Has intention to emigrate	0.4021	0.2366	1.6991	
Engaged in informal employment	0.2054	0.2528	0.8125	
<b>Household characteristics</b>				
Household size	-0.0645	0.1205	-0.5351	
Number of employed members	-0.2680	0.1414	-1.8953*	-23.5%
Has another unemployed member(s)	0.1211	0.2299	0.5269	
Has retired member(s)	0.5079	0.2591	1.9601**	66.2%
Has emigrated member(s)	-0.5885	0.3745	-1.5712	
<b>Policy treatment</b>				
Social assistance beneficiary	0.1812	0.6462	0.2804	
Health insurance beneficiary	-0.3301	0.2257	-1.4624	
Unemployment benefit recipient	0.3566	0.7067	0.5046	
Participation in active programmes	-0.0159	0.3666	-0.0435	

**Note:** \*, \*\* and \*\*\* represent statistical significance at the 10%, 5% and 1% levels respectively.

From Table 3 we can draw several conclusions with respect to the profile of youth unemployed who are the most psychologically affected by the unemployment problem. Regarding the personal traits, education appears to be statistically significant determinant since youth unemployed with higher education have increased probability for stress and other health problems by 136.3% compared to youth with lower levels of education. Furthermore, those who are long-term unemployed experience 178.7% higher probability of being stressed or to have other health problems caused by unemployment. Finally, the youth unemployed who actively search for job are 102.9% more affected by stress than those who do not actively search for job.

Among the household characteristics, having an additional employed member in the household will decrease the probability of being stressed or having other health problems by 23.5%. In contrast, having retired member(s) of the household increases the probability of having such psychological and health problems by 66.2%. With respect to the policy treatment variables, the health insurance benefits and participation in active labour



market programmes have negative signs, but none of these variables appears to be statistically significant.

In order to assess the factors that influence the discouragement of youth unemployed in Macedonia we further estimate a Logit model, where the dependent variable takes value one if the person perceives himself as unemployed after 5 years. In the opposite case, the dependent variable takes value zero. Similarly, as in the case of estimating the impact of unemployment as a stressor, we divide the possible determinants in three groups: Personal traits, household characteristics and policy treatment. The results from the estimated Logit model are presented in Table 4.

**Table 4.** Estimated Logit model for perceiving as unemployed after 5 years

Variables	Coefficient	Standard error	t-value	Diff. in odd ratio
Intercept	2.0212	4.6609	0.4336	
<b>Personal traits</b>				
Male	0.5856	0.6316	0.9272	
Married	-0.0827	1.1396	-0.0726	
Urban	-1.7288	0.6302	-2.7429***	-82.3%
Higher education	-0.0498	0.7749	-0.0642	
Long-term unemployed	1.1203	0.6827	1.6410*	206.6%
Actively search for job	-1.0817	0.6858	-1.5772	
Has intention to emigrate	-0.1845	0.6244	-0.2955	
Engaged in informal employment	-0.1766	0.6618	-0.2668	
<b>Household characteristics</b>				
Household size	-0.6607	0.3900	-1.6939*	-48.4%
Number of employed members	0.3073	0.4170	0.7370	
Has another unemployed member(s)	0.3630	0.6537	0.5553	
Has retired member(s)	-0.2747	0.6855	-0.4008	
Has emigrated member(s)	-4.5851	5.4765	-0.8372	
<b>Policy treatment</b>				
Social assistance beneficiary	1.8468	0.9818	1.8809*	534%
Health insurance beneficiary	0.0173	0.6172	0.0280	
Unemployment benefit recipient	0.9485	1.1998	0.7905	
Participation in active programmes	1.5195	0.8138	1.8671*	357%

**Note:** \*, \*\* and \*\*\* represent statistical significance at the 10%, 5% and 1% levels respectively.

From Table 4 we can notice that among personal traits there are two statistically significant characteristics that make the profile of 'discouraged worker'. For instance, living in urban area will decrease the probability that person perceive himself as unemployed after 5 years for 82.3%, while being long-term unemployed will increase this probability for 206.6%. With respect to household characteristics, an additional member in the household will decrease the probability of the respondent to perceive himself yet as unemployed after 5 years by 48.4%.

Regarding the policy treatment, being social assistance beneficiary will increase the probability for perceiving as still unemployed within the 5 years time horizon by more than 5 times. Having in mind that this category of unemployed is the most deprived it is somewhat expected that they face the poorest labour market prospects. In addition, the participation in active labour market programmes would increase the discouragement by 3.5 times which renders questionable the effectiveness of these programmes.

In order to assess the impact of global economic crisis on the living standard of youth unemployed in Macedonia we estimate a Logit model, where the dependent variable takes value one in the case where the person declared that the global economic crisis has influenced his/her living standard. In the opposite case, the dependent variable takes value zero. Similarly, as in the previous cases, we divide the possible determinants in three groups: Personal traits, household characteristics and policy treatment. The results from the estimated Logit model are presented in Table 5.

**Table 5.** Estimated Logit model for the impact of the global economic crisis on the living standard of unemployed

Variables	Coefficient	Standard error	t-value	Diff. in odd ratio
Intercept	-1.3556	1.6059	-0.8441	
<b>Personal traits</b>				
Male	0.0312	0.2048	0.1523	
Married	0.0935	0.3659	0.2556	
Urban	-0.3180	0.2438	-1.3042	
Higher education	0.4923	0.2476	1.9877**	63.6%
Long-term unemployed	0.2829	0.2139	1.3225	
Actively search for job	0.7179	0.2959	2.4258**	105%
Has intention to emigrate	0.5095	0.2195	2.3207**	66.4%
Engaged in informal employment	-0.0563	0.2236	-0.2520	
<b>Household characteristics</b>				
Household size	-0.0146	0.1084	-0.1348	
Number of employed members	-0.0847	0.1273	-0.6647	
Has another unemployed member(s)	0.2613	0.2073	1.2605	
Has retired member(s)	-0.0104	0.3576	-0.0290	
Has emigrated member(s)				
<b>Policy treatment</b>				
Social assistance beneficiary	-0.2836	0.5565	-0.5095	
Health insurance beneficiary	-0.3097	0.2025	-1.5296	
Unemployment benefit recipient	1.0115	0.6613	1.5297	
Participation in active programmes	-0.1503	0.3363	-0.4470	

**Note:** \*, \*\* and \*\*\* represent statistical significance at the 10%, 5% and 1% levels respectively.

From Table 5 we can notice that among personal traits having higher education will increase the probability that global economic crisis affect the workers living standard by

63.6%. In addition, the living standard has been particularly affected by the crisis among the long-term unemployed and those who actively search for job. Namely, these categories of workers have 105% and 66.4% respectively higher probabilities of perceiving the negative impact of the crisis on the living standard of their households.

## Conclusions and policy recommendations

In this paper we make an attempt to identify the profile of youth unemployed who are affected by the recent economic crisis. The general perception is that despite decreasing trend of unemployment in Macedonia, the youth are still disproportionately affected by unemployment. The unemployment is stressing situation and causes other health problems for youth who have higher education, actively search for job and are long-term unemployed. Particularly discouraged with respect to the future labour market prospects are youth unemployed who live in rural areas, have low income and are long-term unemployed. The recent economic crisis has particularly affected the incomes of youth unemployed with higher education who actively search for job and indicates the potential source of brain-drain.

The previous policy actions in WBCs aiming to reduce youth unemployment covered a range of activities such as: (i) non-formal education, which would provide a much needed complement to formal education; (ii) support of well-organised and sustainable youth organisations that can provide quality services to young people; (iii) youth participation and representation at different levels of governance; and, (iv) development and implementation of National Action Plans for youth (La Cava et al., 2006). However, taking into account that the standard policy measures have so far been insufficient in curing the problem of persistent high youth unemployment, there is a need for alternatives.

Recently, the WBCs committed to the launch of the Positive Agenda for Youth in the Western Balkans (Western Balkans Foreign Ministers Meeting, Brdo, April 23, 2015). The Agenda will include concrete initiatives and proposals, which will be implemented with the help of the European Commission. This is a precise study of mechanisms that the EU already has in place for young people in the Western Balkans. In this context, their effectiveness and accessibility need to be examined and adapted to the situation on the ground, while the programmes available for young people from the EU candidates need to be extended to include the countries in the region.

Having in mind the results from this research we further formulate a set of policy recommendations that will aim to improve the position of youth unemployed on the Macedonian labour market. First, the reforms in the education system and particularly the higher education should take into account the required skills and competences by the employers. In other words, a careful analysis of the labour market needs has to be undertaken prior to any implementation of new or amendment of the existing curricula. Additionally, important guidelines might be learned from the strategic documents for the economic development that identify the core competitive industries in the country. Second, the policies on the supply side should be focused on appropriate reforms of the education system including both the vocational education and training and higher education. Given that the awareness among the social partners involved in the process of designing new curricula and modernisation of the existing ones is still on the relatively low level, incentives should be created among employers to participate in designing the study programmes for the formal vocational education and training as well as for the informal vocational

education of adults. Third, the active labour market policies have to be designed carefully in order to target the most vulnerable labour market segments, particularly with respect to increased employability of the youth. Finally, the policies on the demand side have to generate incentives for additional job creation predominantly in competitive industries where the skill requirements will roughly match the qualification structure of the youth workforce segment.

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