

## Supply of the labor market with labor force - Condition in Macedonia

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**ABSTRACT:** High unemployment rate is present in Macedonia since 1980s. Restructuring of the economy led to total decrease of labor force demand on one hand and the low growth as well as the large investments deficit led to inability of creating sufficient employment opportunities on the other hand. Additionally, the Law on labor relations does not enable sufficient flexibility of the labor market. The recent reforms in the labor market, including the new Law on labor relations since 2005 and its consequent amendments and annexes, are injecting certain reform in the labor market in the benefit of the employers. The unemployment rate in the second quarter of 2015 is 26.8%,

Firstly, the journal pays attention to the constant condition of supplying the labor market with labor force, by analyzing the condition in the labor market as a country striving for integration in the joining economy of the European economic area. The successes and failures of the efforts for reforms in the labor market in the new member states are discussed as a guidance for further discussion. Secondly, the disparity of supply and demand of skilled job seekers, as an aspect of reform process is discussed. The third field of discussion in the paper is development and implementation of active policies in the labor market that guarantee rightful and efficient use of government resources considering the typical unemployment facts in Macedonia.

**KEY WORD:** labor force, mismatch, supply, demand, active policies, labor market, Macedonia.

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### I. INTRODUCTION AND LITERATURE REVIEW

The region is characterized with constant high level of unemployment, low rate of creating jobs (Kovtun et al., 2014), presence of structural unemployment (Mojsoska-Blazevski, 2012) and generally insufficiently developed institutional framework of labor market (John P. Martin, 2014).

Accession to European Union (EU) created opportunities as well as challenges for the new member states (NMS) regarding the labor market. When there is a certainty for EU accession of one country, the flow of foreign direct investments (FDI) is continuous and sure, creating jobs in the labor market of the country that shall access. This creation of jobs will be more expressed and the profile of skilled labor force in the country that is accessing will be better. To be part of the interior market, the free movement of labor mostly decreases the demographic pressure of domestic labor market. However, the exterior migration on the other hand, might result in "brain drain" that will deprive the new member state from those parts of the labor force that are especially important for the growth of productivity. The main challenge for the EU membership consists of providing competitive labor market in a wider sense (Bruecker et al., 2002 and Rutkowski, 2007). If we consider this competitiveness from the side of the labor demand, it means that the labor force, the general regulations, the supply and demand through active policies shall be shaped in the way that they will increase the readiness of the companies to create jobs.

The participants in the labor markets of the countries that aspire for EU accession often have contradictory view about the flexibility of these markets in the beginning of the Union accession. The study of Boeri and Garibaldi (2006) says that the institutions of labor market in the new member states present relative flexibility from one hand, Rutkowski, (2007) and Feldmann (2004) state that their labor markets are still rigid in the early years of the new centuries from the other hand. These contradictory evaluations come from authors that use different comparison criteria. Boeri and Garibaldi compare the institutions of the labor markets in new member states with those of EU-15. However, Rutkowski and Feldmann follow the idea that the only sustainable model should be the institutions of the labor market of Anglo-Saxon countries.

According to our opinion, the preference of the last authors is mostly based on ideology than facts. As Nickell (1997) and Nickel, Nunziata and Ochel (2005) point out, the idea that more flexible labor markets of the Anglo-Saxon states have constant better performance than the labor markets in continental Europe, a hypotheses expressed by Sieber (1997), is a myth if a longer time frame is considered. The reasonable manner to analyze

the reform of the institutions in the labor market is to divide the evaluation to factors that mostly influence the demand labor force and factors that mostly influence the supply of labor force.

On the other hand, economy focuses on the fact that unemployment is the result of an insufficiently effective demand for products and services in the economy. According to (Romer 1990:64) economic growth led to internal sectoral economic changes. These changes lead to structural unemployment. Technological development changed the way of production by reducing the number of employees, while (Pissarides, 1990) and (Postel Vinay, 1998:1091-1115) state that technological development helped for the reduction of unemployment due to the effect of capitalism. (Zaglar 2006:53) analyzed the ratio between economic growth and unemployment in the United Kingdom in the period 1982-1999, and the results showed a strong and negative correlation between economic growth and unemployment. According to him, fast-moving economies will face structural unemployment for a short period.

Unemployment can be minimized by effective planning and human capital improvement. Many economists analyze this ratio between economic growth and unemployment to make estimates from the Okun coefficient. In particular, Okun (1962) at the time of the Kenyanism referred to a stable ratio between the GDP growth and the change in the percentage of employment. The others on the list were Smith (1975), Gordon (1984), Knoester (1986), Kaufman (1988), Prachowny (1993), Weber (1995), Musa (1997, 1999), Attfield and Silverstone (1998), Lee (2000), Harris dhe Silverstone (2001), Sogner and Stiassny (2002), and Silvapulle et al (2004)(in Serafimova, M. 2017).

## 1.2 Research Objectives

The objective of the research is to analyzed the constant condition of supplying the labor market with labor force and the disparity of supply and demand of skilled job seekers, as an aspect of reform process is discussed. The third field of discussion in the paper is development and implementation of active policies in the labor market that guarantee rightful and efficient use of government resources considering the typical unemployment facts in Macedonia, by analyzing the condition in the labor market as a country striving for integration in the joining economy of the European economic area.

## 1.3 Research Methodology and Data Analysis

In order to analyzed the constant condition of supplying the labor market with labor force and the disparity of supply and demand of skilled job seekers and development and implementation of active policies in the labor market that guarantee rightful and efficient use of government resources considering the typical unemployment facts in Macedonia, the paper is going to use relevant literature review and statistical sources for activity rate and employment rate in Macedonia from the National State Statistical Office and sources for contribution of different age groups in the activity rate change comparative analysis of several European countries and Macedonia from Eurostat-European Statistical system. There are analyzed developments in major labour market indicators and active labour market measures in dealing with unemployment: Evidence from Macedonia and Active labor market policies in OECD countries: archetypical types of programs and generic purpose and Active labor market measures in Macedonia.

The sources taken will represent the the happenings in the main indicators for the labor market in Macedonia, compared to EU and several selected countries.

### 1.3.1 Supply of labor force

Since 1980s, Macedonia suffers from high unemployment rates. In the time of independence, the unemployment rate was close to 24%. Restructuring of economy lead to total decrease in the demand of labor force and the total low growth and lack of large investments did not succeed to create sufficient number of employment opportunities (Guide to Doing Business and Investing in Macedonia, 2016).

According to the data of the State Statistical Office, in the IV trimester in 2018, the active population of the Republic of Macedonia was consisted of 957 609 people, 771 806 people employed and 185 803 people unemployed. The activity rate in this period is 56.9, the employment rate is 45.9 and the unemployment rate is 19.4.

**Table 1: Activity rate and employment rate in Macedonia**

T 1: Labour force and activity rates							
	Total working age population	Labour force			Activity rate	Employment rate	Unemployment rate
		Total	Employed	Unemployed			
2017	1 679 935	954 212	740 648	213 564	56,8	44,1	22,4
2017/IV	1 680 394	953 692	745 206	208 486	56,8	44,3	21,9

2018/III	1 682 897	958 770	759 445	199 325	57,0	45,1	20,8
2018/IV	1 683 148	957 609	771 806	185 803	56,9	45,9	19,4

Because of calculations of the sample and rounding up calculated results to one number, sometimes deviations are possible in the total of the results that are obtained by summing up individual items.

Source: <http://www.stat.gov.mk/PrikaziSoopstenie.aspx?rbtxt=98>

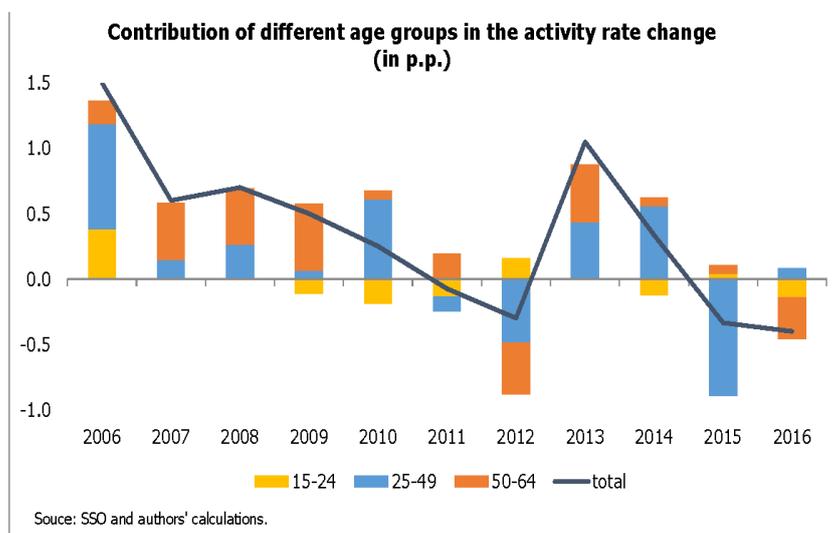
Supply of labor force is defined as part of the total fit for work population in the country that has aspiration to work and it actively seeks work. The most common indicator for measuring the labor force supply is activity. In Macedonia, since 2005, continuous slowing down of the activity rate can be noticed, while in 2011, the activity rate began to fall, except for 2013 and 2014 when it was increased by minimum. The changes in the activity rate can be described with demographic factors (changes in the structure of the total fit for work population as a result of non – economic factors such as “aging of population” and with the working preferences of the population (European Commission, 2012.).

In the Macedonian economy, the changes of the working i.e. non-working preferences of the population (changes in the individual activity rates) are assessed as the main impetus for changes in the activity rate (Hotchkiss, 2009).

The slowing down of the movement of activity rate in the period of 2005-2011 was contributed by the old population (population in the age of 25-49 and 50-64), which matched the changes of the legal framework for labor conditions adopted in 2005 that enabled diversity in defining of employment as well as changes in the framework of collective agreement. The slowing down of the activity rate in 2009 and 2010 and its decreasing from 2011 can be explained with the decreased participation of young people (15-24). In the literature, this is mostly explained by the changes of preferences of the young people regarding continuous education, instead of joining the labor force (Aaronson et al, 2006).

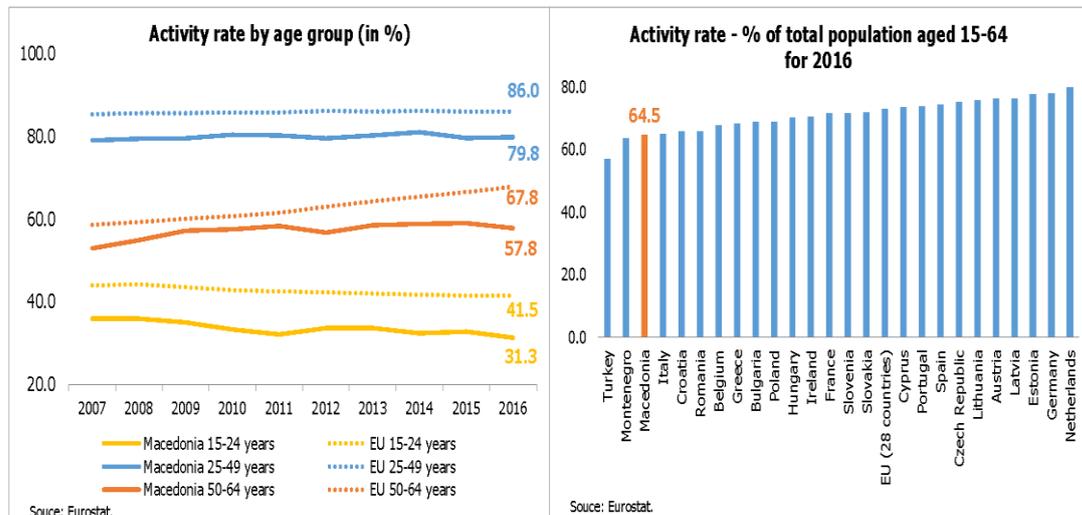
The increased inclusion of the young people in the education system resulted in slower growth or decreasing of labor force supply for short period. However, on larger scale, these movements will result in better and highly qualified labor force, growth of employment and bigger potential for economic growth. The positive movements in the activity rate in the period of 2013-2014 is related to the growth of demand, which caused growth of labor force supply in the same time. These movements are related to the work of new production capacities in the free economic zones, the domestic and foreign investments in the construction sector as well as the fiscal stimulus in the form of publicly financed construction works, agricultural subventions and active labor force, the market measures that were introduced several years in a row. The increase of the activity rate during this period was the result of the increased participation of the middle aged (25-49) population in the labor market. Even though the introduction of these measures and programs continued in 2015 and in the year 2016 they were additionally supported by credit lines provided by European investment bank of small and medium enterprises, the activity rate noticed a tiny downright adaptation, which is related to this movement i.e. the experience of the older category of population as well as a consequence of the decreased participation of the young population (NBRM, 2016).

**Graph 1. Contribution of different age groups in the activity rate change**



Source: Eurostat

Comparative analysis of several European countries demonstrated that besides the activity rate in Macedonia that was 64.5% in 2016, the activity rate is lower in Turkey (56.9%) and Monte Negro (63.4%).



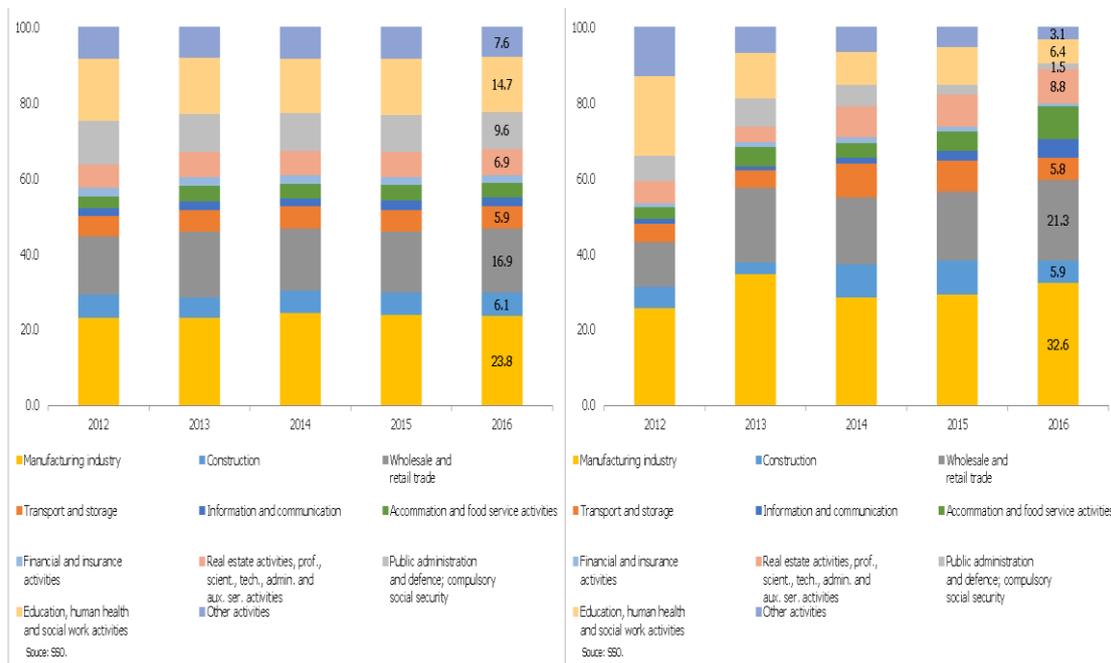
Source: Eurostat

### 1.3.2. Disparity of supply and demand of working skills

The disparity of supply and demand of skills is one of the biggest challenges in the labor market these days. Hence, the global financial crisis is considered an event that caused increase in the long-term unemployment as well as lower specific importance of certain economic sectors. Therefore, the huge losses of jobs in certain countries of the Euro-zone, especially the accent on certain activities in this process, led to huge disparities between the supply and demand of skills in the labor market. However, we can notice in several member states more strict labor force markets, emphasizing that the demand and supply of labor force are not balanced in the member states. Nevertheless, the geographic disagreement in the countries, i.e. the lack of workers in one region and the extra workers in another region are present in Belgium, Italy and Spain. Considering that the crisis decreased the tension of labor markets to a large extent in the whole Europe, the qualitative deficiencies can be increased if the economic healing is raised (EP, 2015).

In order to establish the disparity of supply and demand in the labor market of Macedonia, this analysis uses data of the occupied posts and job vacancies per activity sectors as well as the consequent result of the job vacancies rate in individual activities. Additionally, the discordance of net pays between different activities is of crucial importance to consider, which is regarded as an important reason for existing a large number of job vacancies in certain activities. In this context, the job positions offered in some activities might be considered unattractive for the labor force, if they are regarded as not sufficiently paid compared to the difficulties of the regular tasks that have to be done. This creates a lack of certain skills in the labor market. On the contrary, there shall be surplus of certain skills that are considered to be trendy, attractive and prosperous by the young population that creates a larger supply in the conditions of limited demand and necessity for workers in certain economic fields. This surplus of skills in the condition of lower demand will eventually increase the unemployment rate.

**Graph 4: Major indicators of the labor market in dealing with unemployment**



Source: Krstevska and Ilievska, (2016) *Developments in major labour market indicators and active labour market measures in dealing with unemployment: Evidence from Macedonia*

**1.3.3. Skills supply and demand mismatch by activities**

The skills supply and demand mismatch is one of the largest challenges the labour market is facing nowadays. Thus, the global financial crisis is considered as an event that caused increase in long-term unemployment, as well as lower specific significance of certain sectors of the economy. Accordingly, the extensive job losses in individual Euro area countries and especially the concentration of this process in certain activities, led to large mismatch between the skills supply and demand on the labour market. However, we observe tighter labour markets in some member states, highlighting that labour demand and supply are not balanced across member states. Moreover, geographical mismatches within countries, i.e. shortage of workers in one region and surplus in another region are present in Belgium, Italy and Spain. As the crisis largely decreased the tightness of the labour markets throughout Europe, qualitative shortages may grow if the economic recovery picks up (EP, 2015).

In order to determine the skills supply and demand mismatch on the Macedonian labour market this analysis uses data on occupied posts and job vacancies by sectors of activities, along with the subsequent result of job vacancy rate by individual activities. Additionally, it is essential to take into account the discrepancy in net wages among different activities, which is considered as a significant reason for the existence of large number of job vacancies in particular activities. In this context, job positions offered in some activities may be perceived as unattractive to the workforce if they are considered as insufficiently paid in contrast to the difficulty of regular tasks that are required to be done. This creates lack of certain skills of the labour market. On the contrary, there would be excess of particular skills that are considered as trendy, attractive and prosperous by the young population, which creates larger supply in conditions of limited demand and needs for employees in specific economic fields. This excess of skills in circumstances of lower demand will eventually increase the unemployment rate (Krstevska and Ilievska, 2016).

**1.3.4. Active employment measures**

There is no unique definition and understanding of ALMPs. In the simplest but very narrow sense, ALMPs can be defined as a set of economic measures applied “in order to improve the functioning of the labour market that are directed towards the unemployed”(OECD, 1994) or, in other words, “to improve the labor market position of unemployed workers”( Van Ours and Jan., 2004).

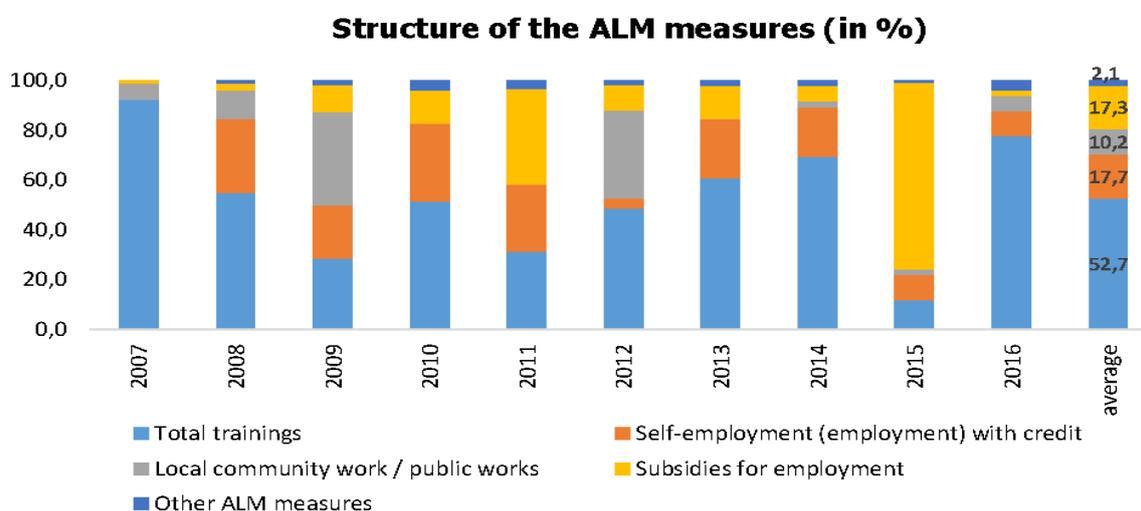
**Table 2. Active labor market policies in OECD countries: archetypical types of programs and generic purpose**

Type of program	Generic purpose
a. Public employment services (“job brokerage”) and administration	Improve matching efficiency
b. Labor market training / Start-up incentives	Attenuate skill mismatch; human capital accumulation
c. Employment incentives / Start-up incentives	Improve job matching process; increase labor demand
d. Direct job creation / Public sector employment	Increase labor demand; prevent human capital deterioration
e. Youth measures (training and/or subsidized jobs)	See b, c and d.
f. Measures for the disabled	Integrate discriminated persons into the labor market

Source: Lehmann and Kluge (2009)

The table is pretty self-explanatory, so its discussion is kept to a minimum (for a more extended discussion, see Lehmann and Kluge (2009).

ALM measures in Macedonia are clearly noticeable since 2007, which is a relatively short period of use, compared to other countries and regions. Among the conducted measures, the typical types of measures are present, even though some are regular (Graph 5) while others are with pauses regarding the use (EARM, 2016).

**Graph 5: Present types of measures and dynamics of their use**

Source: Authors' compilation of the data from EARM.

Source: Eurostat

The effects of ALM measures in Macedonia are still difficult to evaluate, considering the short time period, inadequacy of some of them as well as the changeable dynamics through the years. Therefore, there are not many studies for evaluation of the effects (Mojsoska-Blazevski and Petreski, 2015) and generally considered, it is very difficult to decide on a typical influence model, even though it is apparent that the intensifying of ALM measures is in accordance with decreasing of unemployment in the recent years. When overviewing the correlation coefficients, only unemployment subventions demonstrated negative but in the same time weak correlation (-0.34) with decreasing unemployment tendency. On the other hand, the trainings have positive correlation of 0.7 by unemployed, which means less trainings with decreased unemployment, even though it is not clear if it means to absorb the necessity of trainings to certain degree.

Additionally, the decreasing of job vacancies in 2016 points out a better improvement of skills, which leads to the conclusion that the new employment offers are generally successfully filled in by unemployed people (even though it is not clear to which extent is this related to ALM measures). Additionally, in the empirical literature (European commission, 2016) it is generally accepted that the influence of ALM measures is postponed, even though it is different with different measures, but it has generally lower influence on short term and it significantly influences the work findings on long term.

Within the frameworks of the regular measures, there are several measures that generally include a larger number of participants: self-employment on the basis of business plans selection and support for registration of companies, subventions for employment of people from social risks category, trainings for foreign languages and computers, public works, self-employment with credits and credits of companies for

creating job positions. Even though they are applied regularly, there is some discontinuity in certain measures (apparent in public works). However, the constant financing of APLMP that is based on contribution, bears certain risks. Even though many European countries rely on financing of APPS on the basis of contribution, the weak results in the labor market in these three countries, i.e. the low level of employment, results in limited and instable means for those measures.

Having into consideration that APLMS are mainly financed by the same source as fees for unemployment and other passive measures and that those incomes depend directly from the tendencies of the labor market, the relation between the amount of available financing and unemployment tendencies is inversed (i.e. greater unemployment on the labor market leads to lower level of financing of APPT).

The portfolios of the APPS programs in all three countries are pretty limited. Generally speaking, APLM in these countries are dominantly oriented towards measures for subventions of employment, especially in Albania and Bosnia and Herzegovina, where more the two thirds of the budget for ALPP is used for such programs (see graph 5).

The irregular measures for ALM are pretty different and sometimes they are used only several years, and after that they are terminated. Some of them include specialized trainings in certain fields (crafts, tourism, safety, van driving) or precise support of companies related to opening new job positions. Regarding the number of included people, as an irregular measure, we should mention the releasing of social contribution for employment of young people up to 29 years old in 2015 (within the project "Macedonia employs"). Some irregular measures are totally new, started in 2016 (support for opening kindergartens and retirement homes, support of fast-growing companies).

Considering the structure of all measures of ALM (regular and irregular), if we take into account the average for the period of 2007-2016, we can conclude that trainings were mostly used as an active measure with the purpose of improving the skills of unemployed people to find job on the market by satisfying the requirements of specific skills. On average, 52.7 % of the people included in ALM measures were included in different types of trainings (as explained above).

Self-employment and support of self-employment / employment with credits are the next most popular measures that include 17.7% of the people with ALM measures and subventions for employment (for people from social risks category and young people) with similar participation (17.3%). Public works engage 10.2% of the total number of people with ALM measures, and the rest regard other ALM measures. This structure seems similar to the experience of Latin-American countries regarding the domination of trainings as well as the significant part of self-employment measures, but unlike the subventions that are much more present in Macedonia than Latin America.

Significant improvements were made in 2017 within the managing of public finances. Now it is a critical period for a complete and efficient introduction of this framework. The measure for improvement of the sector for professional education and training is welcome, but the whole educational system should be modernized to meet the needs of the labor market. The government improved the presence and efficiency of the active policies in the labor market (APLM) by initiating the Guarantee for young people and greater focus on young people that are not part of the education, employment or training. The global diagnosis is completely true and it is fortified with ERP this year, but the diagnostic field should be more precise so the basic reasons can be discussed.

Out of 19 measures, 11 are new measures and 8 are transferred, which means those are significant adaptations. The larger part of the fallen measures were rightfully excluded by the estimation of the Commission for their importance of competitiveness and a long-term growth in 2017 (European Commission and the European Central Bank, 2018).

#### **1.4. Conclusions and recommendations for policy**

The unemployment in Macedonia has deep roots, related to the process of economic transition, which contributed to long-term unemployment. However, in the recent years, a tendency for decreasing of unemployment can be noticed, due to several factors, but mainly due to creating job positions in the new companies with foreign capital, in accordance with the active measures and measures on the labor market against the grey economy. The economic cycle as well, contributed to these positive happenings on the labor market. This document demonstrates the happenings in the main indicators for the labor market in Macedonia, compared to EU and several selected countries.

This analysis analyzes the tendencies in the number of employed, the supply of skills and the disparity with demand of activities. A special contribution to the analysis is the introduction of ALM measures in Macedonia, regarding their benefit in the improvement of the workforce and hence the ability of providing job.

- The larger part of the workforce is attracted to specializing in order to obtain skills that are considered to be attractive, prosperous and highly-paid. This movement on one hand generates greater supply in the

conditions of limited demand for employees in specific economic field that will eventually increase the unemployment rate and it creates a lack of certain skills in the labor market on the other hand.

- In 2016 there is a tendency for decreasing the job vacancies rate in almost all activities which signalizes consequent employment of the unemployed population and it demonstrates positive movement in the disparity of skills.
- The analysis showed that ALM measures initiated from 2007 on had different dynamics over the years. They have the common structure as in the other countries, with domination of trainings, followed by measures for self-employment and subventions for employment. However, the decreasing of the number of people that are treated with passive labor measures leaves space for division of assets regarding ALM measures. Moreover, the obtaining of unemployment fees can depend on including several ALM measures in order to improve the skills of the unemployed people for finding job. The influence of ALM measures in Macedonia is still difficult to evaluate, regarding the short time of their use, the irregularities in some of them and the different dynamics over the years. However, in order to appropriately evaluate the influences of ALM, there is a need of appropriate system for ex-post monitoring of included participants, in order to follow the participants in trainings and to conclude if they have really improved their ability to seek job after training, as well as a long-term cooperation with companies introduced within the self-employment and crediting measure. The estimation of the ALM influences should so far create a basis for their better design in the future.

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