The Problem of Unemployment and a Proposal for a Solution: The Macedonian Instance

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Abstract
Unemployment is one of the most important social problems faced by all developed and developing countries. While countries are developing technologically, production systems are changing and it is becoming hard for workforce to keep pace with these developments. From Macedonia’s independence (1991) to 2010, the most important problem in the economy was unemployment. The fact that production ceased in the first years of independence caused both industrial production and total production to decline. Considering the fact that the factories does not work, new people joined to the unemployed group. The Macedonian economy has struggled with high unemployment for 25 years. According to data from the Macedonian statistics agency, the unemployment rate in 2010 was about 39 percent, but in 2015 it has decreased to 25 percent. In OECD countries are implemented active policies in 6 important categories to increase employment. Macedonia has been implementing these policies since 2007. These policies have begun to give positive results. In addition, the decrease in unemployment is linked to foreign investments, but also the policies to struggle unemployment by the government has affected.

Key words: Labour force, employment, unemployment problem, Macedonian economy.

JEL classification: D1, E2, H2, H5, J1, J2

Introduction
After the Declaration of Independence, Macedonia has transitioned from a socialist regime to a free market economy and started the process of restructuring. In this process, the immunity of the private property and the liberalization of the foreign trade have become the main features of the economy. During the years of structural transformation, the Macedonian economy came across problems such as the drawbacks of the industrial sector, the low level of technology deficiency export, the demand increase in imports and exports,
and the high unemployment. Since the independence in 1991, the Macedonian economy has been struggling with a high unemployment rate.

The macroeconomic data of a country reveals the stage of its development. According to the economic literature, the national income, i.e., the growth rate, the inflation rate, the foreign trade value, the budget deficit or surplus, the foreign investments as fundamental macroeconomic data, and especially the data on employment and unemployment have more of a social value than economic one.

**Basic Macroeconomic Indicators**

Macedonian economy experienced growth based on imports until the middle of the second half of the year. There has also been a visible increase especially in foreign investments in recent years, and these developments reflect the real economy. Moreover, some of the remaining public companies from the former Yugoslavia have been privatized. On top of that, the foreign direct investment has also increased when free zones were established.

The table below shows the macroeconomic data of Macedonia.

| Table 1. Macroeconomic indicators | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|-----------------------------------|------|------|------|------|------|------|
| Growth Rate                       | 3.4  | 2.3  | -0.5 | 2.9  | 3.5  | 3.7  |
| Inflation                         | 3.0  | 2.8  | 4.7  | 1.4  | -0.5 | -0.3 |
| Unemployment rate                 | 32.1 | 31.4 | 31.0 | 29.0 | 28.0 | 26.1 |
| Budget Deficit / GDP              | -2.4 | -2.5 | -3.8 | -3.9 | -4.2 | -3.5 |
| Export (Million $)                | 3351 | 4478 | 4015 | 4299 | 4934 | 4490 |
| Import (Million $)                | 5475 | 7027 | 6522 | 6620 | 7277 | 6400 |
| Balance of Foreign Trade (Million $)| -2123 | -2549 | -2507 | -2321 | -2343 | -1910 |
| Foreign Investments ($ Million)   | 206.9 | 473.9 | 165.5 | 305.0 | 261.4 | 193.3 |
| Foreign Investments / GDP         | 2.2  | 4.5  | 1.7  | 2.8  | 2.3  | 1.9  |
| Foreign Exchange Reserves ($ Million) | 1887 | 2276 | 2412 | 2192 | 2681 | 2488 |
| External Debt ($ Million)         | 5452 | 6271 | 6818 | 7194 | 7287 | 6942 |

**Source:** Central Bank of Republic of Macedonia

During the 2010-2015 period, except for the year 2012, the economy began a steady growth trend. However, in all of the countries that left Yugoslavia, there was hyperinflation during the period of independence. Macedonia reduced its inflation rate to single-digit figures as a result of tight monetary and fiscal policies. During the above-mentioned period, the inflation was around 3-4%, but in 2014 and 2015, although it was very low, there was deflation.

When the foreign trade figures of the same period are considered, the foreign trade deficit averages about 2 billion dollars per year since the actual imports are more than the exports. It can be seen that in this period there are no large fluctuations in the foreign exchange reserves and foreign debt figures.

The global financial crisis that broke out in the US and EU in 2008 initially affected small and emerging economies like Macedonia, but the impact was limited. It is noted that foreign investments are realized during this period.

**Labour Force, Employment and Unemployment**

An important indicator of the stage of economic development and social development of any country is the size of its employment and unemployment structure. Unemployment is one of the most important social problems faced by all developed and developing countries. Since most of the countries are technologically developed, the production systems are changing and it is becoming more difficult for our workforce to keep pace with these developments.
It is the population that creates the labour force and possesses the ability and willingness to work. The labour force can be defined as a working age population, which excludes those aged 0-15 years and older than 65 years, from the country’s population, and those of the working age population who either do not desire or are notable to work (housewives, students, retirees, prisoners, disabled, and those who do not want to work) (K.Yıldırım, M.Özer, p.22).

![Figure 1: The Relationship between Population and Labour Force](image)

The labour force is divided into two groups: a group of employees, i.e., employed, and a group of unemployed. Unemployment is the existence of a workforce that does not work but it is available, and that is willing to work for the current wage rates but cannot find a job. The **unemployment rate** is the ratio of the workforce that cannot find a job to the total workforce.

\[
\text{Unemployment Rate} = \frac{\text{Number of Unemployed}}{\text{Labour Force Population}} \times 100
\]

The **labour force participation rate** is the share of the sum of the employed and unemployed in the working age population.

\[
\text{Labour Force Participation Rate} = \frac{\text{Labour Force Population}}{\text{Working Age Population}} \times 100
\]
Labor Market and Unemployment Problem in Macedonia

In the following years of independence, the economic crisis of the country led to economic activities and decline in employment. As a result, the unemployment rate increased and became a fundamental and permanent problem in the country.

As a result of the contraction in the economy, the steady decline in GDP, and the tight monetary and fiscal policies that the government has imposed to fight the hyperinflation, unemployment has become a profoundly deepening problem.

Economically, the main source of problems is the great number of unemployed people as a result of the state economic enterprises that were closed during the first years of independence. For 25 years the Macedonian economy has been struggling against unemployment. The unemployment rate in the country by the year 2015 became around 26 percent.

The table below shows the figures for the Macedonian labour market.

| Year | Working population | Labour Force Population |
|------|---------------------|-------------------------|
|      | Total | Employed | Unemployed |
| 2005 | 1,607,997 | 869,187 | 545,253 | 323,934 |
| 2006 | 1,618,482 | 891,679 | 570,404 | 321,274 |
| 2007 | 1,628,635 | 907,138 | 590,234 | 316,905 |
| 2008 | 1,633,341 | 919,424 | 609,015 | 310,409 |
| 2009 | 1,638,869 | 928,775 | 629,901 | 298,873 |
| 2010 | 1,648,522 | 938,294 | 637,855 | 300,439 |
| 2011 | 1,656,215 | 940,048 | 645,085 | 294,963 |
| 2012 | 1,669,965 | 943,055 | 650,554 | 292,502 |
| 2013 | 1,672,460 | 956,057 | 678,838 | 277,219 |
| 2014 | 1,673,494 | 958,998 | 690,188 | 268,810 |
| 2015 | 1,676,659 | 954,924 | 705,991 | 248,933 |

Source: Central Bank of Republic of Macedonia

After 2005, the labour force participation rate and the employment rate increased in parallel to each other. Population entering the working age at the Macedonian labour market has increased, so the participation rate in the workforce has also increased. Both data, in table 2 and Figure 2, suggest that the increase in employment is faster than the increase of the labour force participation rate. This shows that more labour force is employed than there are new participants. In short, some of the current unemployed people were employed besides those participating in the labour force.
Unemployment rate decreased between 2005 and 2015. The above data suggests that the decline in the unemployment rate was slow since 2008. Yet, despite the financial crisis during the period 2008-2010, the unemployment rate did not increase. However, there was a significant decrease in the unemployment rate in the period between 2012 and 2015.

**Table 3:** Distribution of Employment by Sectors

| Year | Agriculture | Industry | Service |
|------|-------------|----------|---------|
| 2005 | 106,533     | 175,868  | 261,523 |
| 2006 | 114,777     | 186,085  | 268,117 |
| 2007 | 107,717     | 184,928  | 294,305 |
| 2008 | 119,749     | 190,530  | 297,189 |
| 2009 | 116,668     | 187,077  | 324,410 |
| 2010 | 121,771     | 185,243  | 328,778 |
| 2011 | 120,893     | 193,554  | 328,206 |
| 2012 | 112,585     | 194,303  | 341,242 |
| 2013 | 127,186     | 206,260  | 343,013 |
| 2014 | 127,438     | 209,529  | 351,152 |
| 2015 | 126,126     | 215,319  | 361,713 |

**Source:** Central Bank of Republic of Macedonia

The sectoral distribution of employment is an important indicator for the labour market of the country. When the labour market in developed countries is examined, it can be seen that employment on a sectoral basis has shifted from agriculture sector to the industry and services.

When assessing Table 3, it can be seen that the labour force is mostly employed in the service sector.
Despite the fact that in Macedonia sectoral employment has shifted towards agriculture, industry and the service sector, the ones employed in agriculture often go directly to the services sector. In addition, in some cases unemployment seems to decrease in the short term as a result of the employment of unskilled workers in the industry and the services sector, but in the long term, unemployment does not decrease.

When the figures for the period 2005-2015 are taken into consideration, it can be seen that the increase in employment in general has a tendency to decrease the unemployment rate. As developing countries consume more than they produce and most of the consumption takes place in the consumer sector, it is natural employment to increase in this sector.

Although there were slight fluctuations in the industry and agriculture sector in the above-mentioned period, employment still increased in these sectors.

### Table 4: Distribution of Labour By Gender

|          | ACTIVE WORKFORCE | EMPLOYED | UNEMPLOYED |
|----------|------------------|----------|------------|
|          | 2014             | 2015     | %          | 2014     | 2015     | %          | 2014     | 2015     | %          |
| TOTAL    | 958998           | 954925   | 100.0      | 690188   | 705991   | 100.0      | 268809   | 248933   | 100.0      |
| Male     | 579906           | 578506   | 60.6       | 419589   | 423913   | 60.0       | 160316   | 154592   | 62.1       |
| Woman    | 379092           | 376419   | 39.4       | 270599   | 282078   | 40.0       | 108493   | 94341    | 37.9       |

**Source:** Central Bank of Republic of Macedonia

When the distribution of labour by gender is considered, it can be seen that generally men are more involved in the labour market than women. According to the above table, 60.6% of the total active workforce consists of men and 39.4% of women. When employment and unemployment by gender is examined, it is suggested that women are employed more, and that men are on a higher level on the scale of unemployment than women according to the total labour force.

### Proposal for Solution to Unemployment and Applied Policies

In OECD countries active policies are implemented in the following 6 important categories to increase employment (Kliment Ohridski University Publication p. 30-31):
1. To increase the capacity of the employment agency. (To be effective and efficient in bringing together labour demand and supply).

2. Education; the importance of vocational education. (In particular, to complete the education of unemployed people with inadequate education, to direct them to vocational trainings according to their needs, and to prevent the loss of knowledge and talent during the period of unemployment).

3. Support for self-employment or recruitment of new workers (subsidies). To increase the demand for labour.

4. Opening new businesses in the public domain. (To increase labour productivity by increasing labour productivity).

5. Activities for younger generations. (To ensure that education, subsidies and young unemployed people participate in employment).

6. Disability oriented activities. (It is aimed at employment of disabled citizens and their participation in labour force).

Macedonia has been implementing these policies since 2007. Accordingly, the number of those who used programs to increase employment between 2007 and 2015 increased every year.

Apart from the above policies, the Macedonian government has introduced other policies to fight against unemployment, which directly and indirectly are implemented to solve the problem of unemployment and increase employment:

Reduction of taxes paid per worker.

The main objective of the reduction of taxes paid per worker is the Macedonian government to reduce unemployment indirectly by speeding up the employment increase by reducing the tax burden on labour paid primarily by foreign and domestic investors, opening up new businesses, and increasing the demand on workers by increasing the scale of existing companies.

The table below shows the tax rates paid per worker in 2008 and 2015.

Table 5: Tax Rates Paid Per Worker

| Tax Rates Paid Per Worker ( % of gross salary ) | 2008 | 2015 |
|-----------------------------------------------|------|------|
| Pension insurance                              | 21.2 | 18   |
| Health insurance                               | 9.2  | 7.3  |
| Unemployment insurance                         | 1.6  | 0.5  |
| Additional health insurance                    | 0.5  | 1.2  |
| **TOTAL**                                     | **32.5** | **27** |

Source: Republic of Macedonia Ministry of Finance

Republic of Macedonia Ministry of Labor and Social Policy

Encouraging foreign investment.

The fact that foreign investors operate in the country implies establishment of new business areas and new companies. Macedonia offers the lowest cost per worker in the region. In order to attract foreign investment, Macedonia has reduced the social security contributions paid to labour to a minimum.

The institutions and income tax from 15% became the lowest tax in the region and even in Europe when it was reduced to 12% in 2007 and to 10% in 2008. This measure aimed at increasing foreign investments, providing economic growth and reducing the unemployment rate.
Over the last five years, there has been a significant increase in foreign investment. Due to all these developments, unemployment has been decreasing, while the activities of foreign companies in the country, whether directly dependent on production or service sector, have increased the employment.

According to the data from the Macedonian statistics agency, the unemployment rate in the country in 2010 was around 37%, but in 2015 this figure dropped to 26%. The decline in unemployment is attributed to foreign investments, but also to the effects of the government policies on fighting against unemployment.

**Conclusion**

Immediately after the independence, the economic crisis of the country led to the closure of the state economic enterprises which were still in business. This has led to economic activity and decline in employment. As a result, unemployment in the country increased and became a fundamental and permanent problem.

The Macedonian economy was achieving growth based on imports until the mid-2000s, but recently there has been a significant increase in foreign investments, particularly in the labour market.

Since 1991, the Macedonian economy has been struggling with high unemployment. When we look at the figures for the period 2005-2015, we can see that there was still a tendency to increase employment and to decrease the rate of unemployment. While the rate of unemployment in the country was 37.3% in 2005, this rate decreased to 26% in 2015.

To increase employment in OECD countries, active policies were applied in 6 important categories. Macedonia has been implementing these policies since 2007. These policies have provided positive results.

Apart from the above policies, the Macedonian government attracted foreign investors in the country who established new business areas and new companies by reducing the taxes paid per worker, opened up new businesses and increased the demand for workers by increasing the scale of existing companies, and actively promoted foreign investments.

As a result of the high unemployment rate in Macedonia, the fight against unemployment constitutes a significant part of the macroeconomic policies in the country. As a result of active policies in the labour market, the unemployment rate tends to decrease.

When we look at the labour market in general, the employment increasing or unemployment reducing policies reduce the unemployment rate, but the effect is not at the desired level. The decline in the unemployment rate is due to the higher presence of high school students compared to the previous years, the increase of emigrants from Macedonia and the changes in statute and statistics, which are among the other factors that are effective in reducing the unemployment rate.

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