«СТАТИСТИКА – ІНСТРУМЕНТ СОЦІАЛЬНО-ЕКОНОМІЧНИХ ДОСЛІДЖЕНЬ»

ЗБІРНИК НАУКОВИХ СТУДЕНТСЬКИХ ПРАЦЬ

ВИПУСК 4

Частина I

Одеса
2018

STATISTICAL ANALYSIS OF GLOBAL UNEMPLOYMENT

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ANNOTATIONS

Shykula Yu. V., Tarasova K. I. Statistical analysis of global unemployment. *The state of unemployment in the world is studied and its main reasons are determined. Recommendations on ways of regulation of unemployment are given.*
Keywords: *unemployment, labor, market, qualification, income, employment.*

Шикула Ю. В., Тарасова К. І. Статистичний аналіз рівня безробіття в світі. *Вивчено рівень світового безробіття та виявлена його основна причина. Надані рекомендації щодо регулювання проблеми безробіття.*
Ключові слова: *безробіття, праця, ринок, кваліфікація, дохід, трудова зайнятість.*

Шикула Ю.В., Тарасова К.И. Статистический анализ уровня безработицы в мире. *Изучен уровень мировой безработицы и определена ее основная причина. Даны рекомендации для регулирования проблемы безработицы.*
Ключевые слова: *безработица, труд, рынок, квалификация, доход, занятость.*

Problem statement. Unemployment is a phenomenon that occurs when a person who is actively searching for employment is unable to find work. Unemployment is often used as a measure of the health of the economy. The most frequently measure of unemployment is the unemployment rate, which is the number of unemployed people divided by the number of people in the labor force. The global unemployment rate has risen modestly in the middle of 2017, to 5.8% (from 5.7% at the end of 2016) – representing 3.4 million more unemployed people globally (bringing total unemployment to just over 201 million in the middle of 2017), causing various economic problems.

Analysis of recent researches and publications. Global unemployment is a subject of work of numerous scientists and organizations, such as The International Labor Organization, The SPSSI and others.

Selection of the unsolved questions. During the last decades the

economic and working environments have rapidly and seriously changed. One can blame such factors for this as integration, globalization, technological and scientific revolutions. Thus, for instance, robotics has put our population in the place of seriously reevaluation and reviewing the kinds of jobs we have and even restructuring the production by reducing the job offerings. That is why the problem of unemployment is especially of interest in the current era.

The aim. The aim of this paper is to study the problem of global unemployment and to determine its consequences.

Research findings. The problem of unemployment is one of the main ones of economic development around the world. There are a lot of things that depend on the rate of unemployment, among them we can first of all name the level of crime, the standards of living, the presence of qualified workers, emigration level. Unemployment increases susceptibility to cardiovascular disease, somatization, anxiety disorders, depression, and suicide. In addition, unemployed people have higher rates of medication use, poor diet, physician visits, tobacco smoking, alcoholic beverage consumption, drug use, and lower rates of exercise. For every 10% increase in the number of unemployed there is an increase of 1.2% in total mortality, a 1.7% increase in cardiovascular disease, 1.3% more cirrhosis cases, 1.7% more suicides, 4.0% more arrests, and 0.8% more assaults reported to the police.

Every country, without exception has its own so-called "natural" unemployment. For example, in Australia it is 5.7% and in Estonia it equals to 7.3%. But when it is too high, it can lead to serious consequences. That is the reason why every country should have a goal to minimize its level of unemployment. Thus some measures are to be taken:

- To create new working places;
- To Remake the education system which would fit the modern market;
- To make favorable conditions for private business, etc.

The state of global unemployment is represented in Table 1.

Table 1

Indicators of global unemployment, 2009-2017

Indicator	2009	2010	2011	2012	2013	2014	2015	2016	2017 (prognosis)
Unemployed people, millions persons	197.7	195.1	193.8	195.2	198.6	196.4	197.1	199.4	200.5
Unemployment rate, %	6.2	6.1	6.0	6.0	5.9	5.8	5.7	5.7	5.8

In order to make these data more illustrative, we represented the chain growth rates of both indicators in Figure 1.
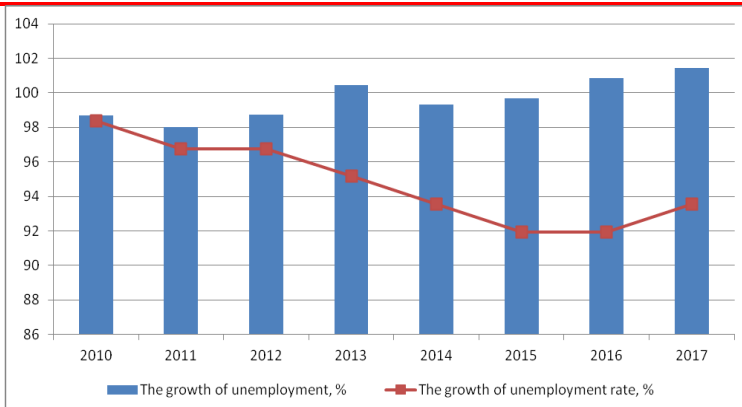
Figure 1. The dynamics of global unemployment, 2010-2017.

As the Figure 1 shows, the number of unemployed people is growing, but the growth of unemployment itself shows the positive changes – it gets smaller.

The unemployment can be represented in the form of a macroeconomic problem which has a strong impact on every citizen as it leads to mass poverty, salary decrease and unstable political and social situation [1].

Talking about politics, high levels of unemployment can be causes of civil unrest, in some cases leading to revolution, and particularly totalitarianism.

Unfortunately, such situation can be observed not only in the developing but also in the developed countries. The unemployment rate for developed economies decreased from 7.1% in 2015 to 6.7% in 2016. In most cases, however, these improvements were not sufficient to eliminate the jobs gap that emerged as a result of the global financial crisis [2].

The trends and projections regarding unemployment around the world can be observed in the Table 2.

The information of Table 1 states that the employment outlook has now weakened in emerging and developing economies. At the same time the unemployment is getting higher in Central and Western Asia.

Also we must add, that job quality remains a major challenge. While there has been a decrease in poverty rates, the rate of decline in the number of working poor in developing economies has slowed and vulnerable employment still accounts for over 46% of total employment globally, affecting nearly 1.5 billion people [3].

Vulnerable employment is particularly high in emerging and developing economies, hitting between half and three-quarters of the employed population in those groups of countries, respectively, with peaks in Southern Asia (74%) and sub-Saharan Africa (70%). Moreover, there are a lot of working people that are living in poverty (Table 3).

Table 2

Unemployment rate and total unemployment: trends of 2016 and prognosis for 2017

Unemployment developments	Percentages		Millions	
Country/region	2016	2017	2016	2017
WORLD	5.7	5.8	197.7	201.1
Developed economies	6.3	6.2	38.6	37.9
Emerging markets	5.6	5.7	143.4	147.0
Developing economies	5.6	5.5	15.7	16.1
Arab States	10.7	10.6	5.8	5.9
Eastern Asia	4.5	4.5	41.6	41.9
Eastern Europe	6.2	6.1	9.1	9.0
Central and Western Asia	8.9	9.2	6.6	6.9
Latin America and the Caribbean	8.1	8.4	25.1	26.6
Northern Africa	12.1	12.0	9.0	9.1
Northern America	5.1	5.1	9.4	9.5
Northern, Southern and Western Europe	9.3	9.1	20.2	19.7
South-Eastern Asia and the Pacific	3.8	3.8	13.3	13.7
Southern Asia	4.1	4.1	29.5	29.8
Sub-Saharan Africa	7.2	7.2	28.0	29.1

Table 3

Unemployment, vulnerable employment and working poverty: trends of 2016 and prognosis for 2017

Country grouping	Unemployment rate, (%)		Unemployment, (millions)	
	2016	2017	2016	2017
WORLD	5.7	5.8	197.7	201.1
Developed countries	6.3	6.2	38.6	37.9
Emerging countries	5.6	5.7	143.4	147.0
Developing countries	5.6	5.5	15.7	16.1
	Extreme and moderate working poverty rate, (%)		Extreme and moderate working poverty (millions)	
	2016	2017	2016	2017
Total emerging and developing countries	29.4	28.7	783.0	776.2
Emerging countries	25.0	24.3	599.3	589.9
Developing countries	69.0	67.9	183.6	186.3

Meanwhile, the data shows that informal employment – as a percentage of non-agricultural employment – exceeds 50% in half of the developing and emerging countries with comparable data. In one-third of these countries, it affects over 65% of workers.The lack of decent jobs leads people to turn to informal employment, which is typically characterized by low productivity, low pay and no social protection. This needs to change. Responding urgently and vigorously to the scale of the global jobs challenge is key to success.

Taking into consideration economic side of the question, one can say that high and persistent unemployment, in which economic inequality increases, has a negative effect on subsequent long-run economic growth. Unemployment can harm growth not only because it is a waste of resources, but also because it generates redistributive pressures and subsequent distortions, drives people to poverty, constrains liquidity limiting labor mobility, and erodes self-esteem promoting social dislocation, unrest and conflict. People who have no job cannot earn money to meet their financial obligations which, in some cases, forces them to become homeless.

Another complication is that in the world of work for women around the globe is affected by a range of dimensions, but two interrelated dimensions stand out.

First, the division of labor by gender, indicated by occupational segregation and wage differentials, precipitates the inequalities that women face in the labor market. Women are frequently crowded into a narrow range of occupations and sectors, where they are overrepresented in lower-paid and low-quality positions. To an extent, this segregation contributes to the large differences in earnings between men and women – while occupations considered to be female-dominated are consistently undervalued and incur wage penalties for both men and women within the occupation.

Second, socio-cultural norms and stereotypes shape gender roles that identify women with restrictive characteristics and capabilities in the labor market. These norms reinforce existing inequalities by justifying discrimination in the labor market, despite improvements in education and skills, and, inevitably, shape women's engagement and preferences in the labor force. These rigid gender roles affect not only the types of work women and men do, but also the amounts of work they do, when considering that women bear the larger burden of unpaid care and household labor. The interactions between these dimensions have led to the persistence of gender gaps in decent work opportunities. In this regard, the challenges facing women represent opportunities for targeted and well-designed policies to address each of the employment dimensions.

Almost half of migrant workers live in high-income regions, particularly Northern America and Northern, Southern and Western Europe, which are estimated to be home to approximately 20% and 16% of total migrant workers, respectively. The share of migrant workers is highest in the Arab States, where migrant workers represent 35.6% of all workers in the region. In other regions, such as Eastern Europe and South Eastern Asia and the Pacific, the shares are considerably lower, at below 9 per cent and 8 per cent, respectively [4,5].

Conclusion. Globalisation and technological developments appear to have an ever-increasing effect on daily life, and the demand for different types of labor and skills changes, sometimes at a rapid pace. While enterprises try to improve their productivity and become more competitive and innovative, they may well seek to pass on risk to the labor force through greater flexibility — both in relation to those already in employment, as well as those searching for a new job. Within the context of the European employment strategy, there are

a number of measures that are designed to help encourage people to remain in work or find a new job, including: the promotion of a life-cycle approach to work, encouraging lifelong learning, improving support to those seeking a job, as well as ensuring equal opportunities. One of the main concerns for policy-makers should be the high level of youth unemployment recorded all over the world.

Scientists say there are a lot of ways to decrease the unemployment. There are a lot of ways to decrease the unemployment. The most popular ones are represented below:

1. The first solution is the introduction of an expansive monetary policy. It's powerful, quick and effective. Lower interest rates make it easier for families to borrow what they need. This method stimulates enough demand to put the economy back on track. Low interest rates also allow businesses to borrow for less. That gives them the capital to hire enough workers to meet rising demand.

2. The second solution is the fiscal policy that is used when the first on is ineffective. Cutting taxes works like lowering interest rates. Both give businesses and consumers more money to spend. That increases demand. It gives businesses more cash to invest and hire more workers.

3. One of the best solutions that is introduced by government is represented in the form public work projects and funding education. Those methods are very effective, they benefit the economy but they are very expensive for the government. We recommend using those methods more though the ability to use them can be very limited.

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