Theoretical Aspects of Labor Market Development
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Abstract- By the author analyzed theoretical aspects or labor market development. Also was described the essence of scientific theories on the development of the labor market, including Keynesian and monetarist theories. The main directions of application of the Shapiro-Stiglitz model are proposed for sustainable development of the labor market and ensuring its balance taking into account new factors.

Keywords: Economics, employment, market, labor market, Keynesian, Shapiro-Stiglitz model.

I. INTRODUCTION

Creating conditions necessary for effective work, decent wages, modern housing, quality education and medical care, ample opportunities for recreation and leisure - all these are important factors that determine the nature and content of reforms in the economic sphere. Ensuring the employment of the population in Uzbekistan is one of the priority directions of socio-economic development, an important condition for raising the standard and quality of life of the people. Every year in Uzbekistan, appropriate programs aimed at sustainable development of the national economy, more complete and rational use of labor resources, and provision of social protection of the population are adopted, and rapid reforms are being implemented in this regard. Notable characteristics of the national labor market are: the majority of the population is young (more than half a million graduates need employment assistance each year); There are more than 700,000 unemployed people, as well as an imbalance between labor supply and demand; higher levels of unemployment and informal sector employment in some districts, etc.

The labor market plays an active role in regulating employment. The development of market relations requires the development of social labor relations. This makes it necessary to increase employment and improve its structural structure.

It is known that the situation in the world labor market, like all other markets, is determined on the basis of supply and demand and is determined by a number of factors. These factors are conditionally divided into economic, demographic and political factors and they are interrelated. Among them, economic factors are the most important, because all other factors ultimately become economic problems or have economic consequences. [1] Today, one of the urgent issues is the practical application of scientific theories, taking into account various factors, to increase the efficiency of the labor market.

II. LITERATURE REVIEW

There are different approaches to studying the mechanism of employment and the labor market. Generally, four conceptual approaches are distinguished in the economic literature: classical, new classical, Keynesian and monetarist approaches. The classical theory of the labor market is based on classical political economy studies.

In this regard, supporters of the Keynesian theory (J. Keynes [2], R. Gordon [3]) argue that the market is in a state of permanent and deep imbalance. The main principles of this theory are as follows:

- there will be no mechanism to guarantee full employment in the economy;
- that full employment is more casual than formal;
- the cost of labor is fixed and practically does not change towards a decrease;
- the price of labor cannot be a regulator of the labor market;
- the state should fulfill its role as a regulator of the labor market, which can reduce or increase the aggregate demand and thereby eliminate the imbalance in the labor market;
- regulation of labor demand not by market prices of labor, but by the volume of production;
- that unemployment has a compulsory nature, but some of it has a voluntary nature.

In conclusion, it should be noted that the classical and Keynesian theories, which have different worldviews and are distinguished by deep differences, form the basis of disagreements. These theories provide the best conclusions for a society with a market economy system and a competitive spirit. Individual rights and freedoms are central to classical theory and are thought to be unlimited and inviolable. Proponents of the classical school consider state activity to be a serious threat to individual rights and freedoms.

Supporters of the monetarist theory of the labor market prioritize monetary and credit methods in order to ensure employment and economic stabilization. M. Friedman [4], K. Brunner [5], are supporters of these theories. They were awarded the Nobel Prize in 1976 by M. Friedman will lead.

The main rules of monetarist theory are as follows:

- due to the internal tendencies of the market economy, it strives for stability, self-regulation;
- if market economy distortions occur as a result of imbalances, they first occur as a result of external interference;
- state intervention leads to disruption of economic development;
- the number of state regulators should be reduced as much as possible, with the exception of tax and budget regulation;
- the establishment of the minimum wage by the state increases the imbalance in the market and is a negative factor in the labor market;
- it is appropriate to use the levers of the Central Bank to create balance in the labor market.

Which of the considered theories solved advanced and modern problems, which one of them has advantages and disadvantages will be shown. At present, in the practice adopted in most countries, one can observe the tendency towards Keynesianism or monetarism. For example, Uzbekistan conducts its economic policy based mainly on monetarist theory. But the theories under consideration mainly originate from the financial policy in regulating the labor market.

III. METHODOLOGY

Employment and unemployment problems are one of the main problems of macroeconomics. If neoclassical theories discussed the duration of unemployment in the labor market due to changes in wage rates in the 9th and early 20th centuries, then from the time of Keynes, the emergence of long-term unemployment began to be explained by the limitations in the demand for labor as a result of the rigidity of prices and wages in the labor market.

This situation continued until the 1980s and was radically changed by the Shapiro-Stiglitz [6] (Shapiro-Stiglitz (1984)) model, which explained that persistent unemployment is caused by the effects of instability in the labor market. In other words, unemployment cannot persist for a long time even in the face of perfectly fluctuating prices and stable wages, and it arises because of the effect of moral hazard in the labor market.

A key assumption in the Shapiro-Stiglitz model is that firms will not be able to fully control the work of workers. According to him, due to the effect of moral risk in the labor market, the worker is "distracted" from his duties, that is, he does not work at full capacity. (This is what Shapiro and Stiglitz call "shirking").

Shapiro-Stiglitz model (English: Shapiro-Stiglitz model) is an economic model that represents the situation that arises in the labor market when wages are increased to a high level. A distinctive feature of the model is the introduction of an additional variable - labor intensity - to increase the level of wages and labor volume, which makes it possible to show the resulting differences between classical theories and real indicators. The model is especially important for new Keynesian theories, because it shows the cases of market mechanism violations in the formation of labor market indicators.[7]

Let's look at the mathematical interpretation of the Shapiro-Stiglitz model. According to this model, the production function will be as follows:

\[ Y = F(e, L), \]  

(1)

that is, the production function of the short-term firm, in addition to labor, is also related to the previously defined factors, as well as labor intensity.

In that case, the profit of the enterprise is determined using the following formula: [8]

\[ \Pi = F(e, L) - wL, \]  

(2)

that is, the profit of an individual firm depends on the labor intensity, the amount of labor and the wage rate.

Also, the intensity is determined by the following formula:

\[ e = e(w), \; e' > 0, \; Y(e) > 0 \]  

(3)

that is, intensity is a function of wages, and output is directly proportional to intensity.

In other words, a new parameter of labor intensity is added to the short-term production function.[9]

Thus, firms maximize profits,[6]

\[ \pi = Y - wL, \]  

(4)

where: production function \( Y = F(eL); \) L- amount of labor and labor intensity factor e (effort).

As usual, we assume that the production function increases \( F > 0 \) and reaches saturation \( F < 0 \), and we assume that the labor intensity factor depends on a positive wage rate:

\[ e = e(w), \; e > 0 \]  

(5)

In this case, the optimization criterion for the firm will have the following form:

\[ F(e(w)L) - wL \rightarrow \max w,L \]  

(6)

Therefore, taking into account this methodological justification, the change of the production function represents the increase in labor productivity through the addition of a new factor.
IV. ANALYSIS AND RESULTS

One of the main ideas of the Shapiro-Stiglitz model is to determine the equilibrium point in the labor market. For this, the Shapiro-Stiglitz model is represented graphically, and the equilibrium point is found in it (Fig. 1).

![Graphic interpretation of the Shapiro-Stiglitz model](source)

Source: Compiled by the author based on scientific literature

In the graph of the Shapiro-Stiglitz model, labor supply is represented by the NSC curve, located above the aggregate supply curve in the AD-AS (aggregate demand-aggregate supply) model of the labor market. The NSC curve is drawn by connecting the different areas of the graph depending on the change in workers' wages (W), the quantity of labor (L), and their monetary loss when workers are fired.

The NSC curve represents the supply of labor that maximally induces all workers to work (an unknown function).

Therefore, it is determined not by workers, but by firms, as in classical models, by setting unusual amounts of labor and wage rates. The firm's labor demand also changes due to the addition of the parameter e (ie, intensity). The intersection of labor supply and demand is a stable equilibrium point in the labor market.

This balance applies to all groups of a certain category of specialists in the labor market. In this case, the labor supply in the form of a vertical line represents the full employment of applicants for the same position in all firms.

V. CONCLUSIONS

For the effective functioning of the labor market, it is appropriate to use the models proposed by representatives of various scientific schools. In particular, in this regard, the application of the Shapiro-Stiglitz model and the use of a new factor representing labor productivity, the labor intensity factor e (effort), is one of the new directions in this regard. In general, in the conditions of the development of the modern economy, if the main directions put forward in various theories are applied in practice, it will help the labor market in the country to function more efficiently.

REFERENCES