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# WAGE: MICRO- AND MACROECONOMIC APPROACHES OF RESEARCH OF THE MECHANISM OF FORMATION AND INCREASE

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This article is devoted to the study of the micro- and macroeconomic functions of the formation and increase of wages in the labor market. It is proved that wages, in addition to such basic functions as: reproductive, stimulating, regulating, social, formation, increase and balance of the solvency capacity of the national market, must also perform structural and protective functions. The main approaches and factors of influence on the level of wages are identified and a mechanism for its regulation is proposed, which will help determine the main directions of stabilizing the situation with wages in the country. In modern conditions, wages do not fully perform any function. Thus, to increase the stimulating function in Ukraine, it is necessary to use such factors of influence as: investment and innovation activity, development of entrepreneurship, self-employment. This will contribute to the growth of economic productivity, revision of living standards of the country's population in accordance with European social standards. The low level of wages is the main reason for the growth of hidden unemployment and a significant drop in the solvency demand of the population. The low level of wages is one of the main reasons for the prolonged stay of the Ukrainian economy in a state of crisis. Wages are not only an indicator that determines the general standard of living of workers. The development of the economy in general depends on its condition and forms of implementation. The components of the mechanism for the formation and increase of wages using micro- and macroeconomic approaches have been studied. At the current stage of the development of the Ukrainian economy, the problem of remuneration for labor by implementing an effective mechanism for its regulation is relevant, since the economic processes taking place in the country do not contribute to the motivation of personnel through wages. Due to inflationary processes and the constant depreciation of the domestic currency, wages cease to fulfill their main function - reproduction. Economic growth in the country is impossible without increasing labor productivity, which cannot be achieved without strengthening the stimulating role of wages. Micro- and macroeconomic approaches have been applied to the formation and increase of wages, which makes it possible to regulate the level of wages and achieve the level of European countries. The proposed microeconomic approach in the form of monopsony allows you to regulate the level of wages by regulating supply and demand in the labor market. The proposed macroeconomic approach allows you to reduce the unemployment rate by improving the quality of life.

**Keywords:** wages, monopsony, labor force, unemployment, employment, perfectly competitive market, labor supply, labor demand.

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## Introduction and statement of the problem

At the current stage of the development of the economy of Ukraine, the problem of payment of labor through the introduction into practice of an effective mechanism of its regulation is relevant, since the economic processes taking place in the country do not contribute to the motivation of personnel through wages. In connection with inflationary processes and constant devaluation of the domestic monetary unit, wages cease to fulfill their main function - reproductive. Economic growth in the country is impossible without increasing labor productivity, which cannot be achieved without increasing the stimulating role of wages.

### Analysis of recent research and publications

The methodological principles of the essence of wages, forms and systems of payment of labor were reflected in the works of such domestic and foreign scientists as: V. Antonyuk, D. Boginya, I. Hnybidenko, A. Kolota, S. Lebedeva, S. Mocherny, M. Pankov, V. Petyukh, G. Solovyov, S. Sheleshkova, S. Brew, K. McConnell, A. Smith, J. Sei, J. Keynes, W. Jevons, L. Dublin, K. Marks, K. Menger, V. Petty, D. Ricardo, A. Smith and others. However, despite a significant number of scientific works and views of scientists, which are devoted to the peculiarities of accrual and payment of labor, there are uncertainties in the conceptual apparatus, therefore there is a need for further deeper study of it due to the possibility of using foreign experience [1-2].

## The purpose of the article

To substantiate the components of the mechanism for the formation and increase of wages using micro- and macroeconomic approaches. To propose micro- and macroeconomic approaches for the formation of wages, in particular, the application of the monopsony method and the ratchet effect, which will allow regulating the level of wages and achieving the level of European countries.

## Presentation the main material

Wages take a priority place in the system of financial levers along with the profit of entrepreneurs, taxes, subsidies, subsidies, lending, etc. Forming the solvent demand of households, wages determine the dynamics of the country's economy and thus are inextricably linked with the economic activity of the population.

Wages are a key element of the economic mechanism and its analysis can be considered both from the point of view of microeconomics and macroeconomics. Both approaches offer different perspectives on the processes of formation, regulation and impact of wages on the economy as a whole and individual economic agent [3].

Microeconomics studies individual markets, including the labor market, where wages are precisely the price of a commodity that is bought and sold here, such a commodity being labor power. In the labor market as a segment of the production factor markets, in contrast to the market of goods and services, the bearers of offers are households, and the consumers are manufacturing firms. Wages are precisely determined by the interaction of labor supply and demand; it will be the price received by the employee as the bearer of the labor supply for the use of labor power, his professional abilities. The wage rate (w) is formed on the labor market as the main source of income of this factor of production and on the level of which the wellbeing of households depends. Workers offer their labor power in order to receive wages. Labor supply decisions depend on people's work and leisure preferences.

Pricing in the markets of factors of production plays an important role in the economy: it determines the share of each worker in the product produced, the incomes and the level of well-being of all those employed in social reproduction.

Employers in the labor market are buyers of labor, and the demand for labor depends on the marginal productivity of workers. The higher the labor productivity, the more employers are willing to pay. Enterprises hire workers until the time when the marginal costs of one additional worker will be equal to the marginal profitability of this resource [4].

In Fig. 1 presents a situation of perfect competition in the labor market, when a large number of sellers and buyers of labor cannot influence the price of this factor of production. In this case, the wage rate (w) for an individual competitive firm is fixed (wE) and does not depend on the amount of labor that the firm employs. The supply of labor graphically has the form of a horizontal line, since each individual worker accepts the level of wE that is formed in the industry. In a competitive labor market, the supply curve for labor (SL) coincides with the demand curve for labor (DL), which is also the marginal product in monetary terms (MRP). It is known that the firm hires the factor of production until the profit from hiring an additional unit exceeds the costs, that is, the amount of economic resource used by the firm is determined by the ratio:

$$MRP = MRC. (1)$$

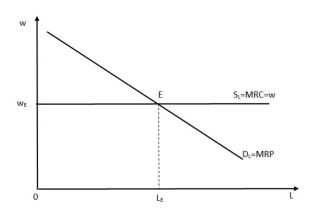


Fig. 1. Demand and supply of labor in the competitive labor market w

The assumption that resource owners are rewarded according to the marginal productivity of the resource is known as the theory of income distribution according to the marginal productivity of the resource. Based on this principle, the remuneration of each worker is exactly equal to his contribution to the production process. If a worker, or the owner of another resource, hides a unit of the factor of production from the market, he will suffer losses equal to the value of the resource, which will be lost to the economy as a whole. However, such a situation is typical only for a perfectly competitive market. For a competitive market, including the labor market, this ratio is:

$$MRP=w(pL). (2)$$

Microeconomic analysis examines the mechanism of establishing an equilibrium price in both a competitive labor market and an imperfectly competitive market. In a perfectly competitive labor market, as shown above, this equilibrium is established at the intersection of the labor supply and demand curves (ie). If the wage is set at a level higher than the equilibrium level, i.e. higher than wE, this can lead to an excess of labor supply (unemployment) (SL>DL), and if lower - to a shortage of workers (SL<DL), a labor shortage, therefore, the elasticity of labor demand is examined, which depends on how easily employers can replace labor with capital: if labor is easily replaced by machines, then the demand for labor will be more elastic, and even a small increase in wages can lead to a decrease in the demand for workers.

The mechanism of formation of the equilibrium price in the competitive labor market is the theoretical basis of the study of the functioning of its realistic model, that is, the imperfectly competitive labor market (Fig. 2). Microeconomic analysis in this case emphasizes the monopsony labor market, when one buyer of labor is opposed by many sellers of labor, the employer creates or dictates the price of the resource. A monopsonist seeking to attract new workers raises the wage rate. But at the same time, he must pay a higher rate to those workers who were already employed, and thus the costs of this factor of production will exceed its price [5].

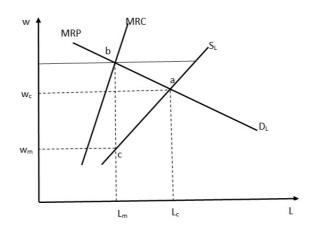


Fig. 2. Monopsony model

The marginal resource cost curve (MRC) in a monopsony labor market is located above the labor supply curve (SL). Equilibrating MRC with labor demand (DL=MRP) at point b, the monopsonist will hire Lm workers (compared to Ls under competition) and pay the wage rate wm (as opposed to the competitive rate wc), thereby increasing the monopsonist's profit.

The introduction of the latest technologies in production allows increasing attention to the education, skills and experience of employees as an investment in human capital. More qualified workers have correspondingly higher productivity and, as a result, higher wages. Wage differentiation is also the subject of micro-analysis, which explains pay differences by skill level, working conditions, workplace risks, occupational prestige, and regional differences in the cost of living and unemployment.

A macroeconomic approach to the analysis of wages focuses on general trends in the economy and considers wages as one of the factors that affect general economic indicators: employment, inflation, economic growth and the general level of welfare in a country.

Macroeconomic analysis links wages to inflation. Rising wages can lead to cost inflation, which is evidenced by increased costs for firms that are passed on to the final prices of goods and services. On the other hand, an increase in wages increases the

purchasing power of consumers, which can stimulate demand-side inflation, which is evidenced by an increase in the demand for goods, which leads to an increase in prices.

In macroeconomics, there is a popular hypothesis that there is an inverse relationship between the unemployment rate and inflation; this is graphically illustrated by the Phillips curve. A reduction in unemployment is often accompanied by an increase in wages, which, in turn, can stimulate inflation.

Logically, an increase in wages leads to an increase in household income, which stimulates consumer demand. As a result, increased demand stimulates and supports production, which contributes to economic growth. However, raising wages too quickly can lead to reduced company profits, reduced investment and economic activity. For sustainable economic growth, it is important to maintain a balance between wage growth and labor productivity.

At the macro level, wages and the unemployment rate are interrelated. If wages are set very high, such as by unions or minimum wage laws, this can lead to higher unemployment because employers cannot hire as many workers as they could at lower wages.

The natural level of unemployment in the presence of existing frictional and structural unemployment can be maintained thanks to an increase in wages.

It is known that the main macroeconomic postulates are derived from macroeconomic models. In the "AD-AS" model, wages are considered as household incomes in the context of aggregate demand and as the opposite — a change in aggregate supply due to production expenditures. The task of wage growth is to bring it to the optimal level, which should stimulate aggregate demand, without leading to an increase in costs that can cause inflation or reduce employment.

An interesting study regarding the increase in the level of indicators of the development of the national economy, for example, income, consumer spending, government spending, using the basic macroeconomic model "AD-AS" in the so-called "ratchet effect". With the help of this non-standard term for economic science, borrowed from mechanics, a unique phenomenon is analyzed in which, after the level of above-mentioned indicators has increased, it is difficult to return to the previous state, even if the circumstances have changed. Traditionally, this is explained by the fact that economic agents are not inclined to reduce their costs or expectations after an increase in income or an improvement in the state of the economy.

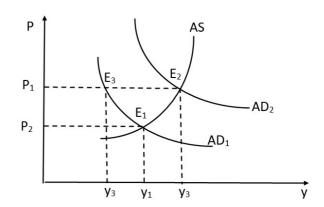


Fig. 3. The schedule of the ratchet

The ratchet effect can occur for the following reasons:

- households usually get used to a higher standard of living and therefore a return to a lower level of income or consumption is perceived negatively;
- spending on social programs, including social assistance, is difficult to reduce due to citizen resistance;
- labor costs are difficult to reduce, difficult to reduce, because they are pre-arranged agreements.

In practice, the ratchet effect manifests itself in the fact that households increase their spending on goods and services after an increase in income, but do not reduce them after their income has decreased. Consumers tend to maintain the standard of living to which they are accustomed, even in cases of difficulties that have arisen under certain circumstances.

The ratchet effect in the labor market is manifested in the fact that, after an increase in wages, workers are not ready to return to the previous level of earnings, even if their labor productivity has decreased. This could result in reduced labor market flexibility and increased unemployment, as employers are unwilling to maintain previously high levels of pay for lower productivity.

Graphically, the ratchet effect is illustrated with the help of "AD-AS" curves, this allows you to explain the asymmetry of price changes: prices rise easily, but fall hard. This is due to the above-mentioned factors (contracts, government regulation, fear of companies not to lower prices in order not to damage their reputation).

In this difficult time for Ukraine, the problem of maintaining wages at the achieved level and increasing them in the future to the level of wages in European countries (Table) [6] will continue to arise.

Average	salary	in	Euroneau	n countries	for	the	vear	[6]	ī
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Serial number	Country	Salary, €
1	Bulgaria	10300
2	Hungary	12620
3	Romania	13000
4	Poland	14430
5	Greece	15880
6	Slovakia	16160
7	Croatia	16170
8	Czech Republic	18710
9	Portugal	19300
10	Estonia	21480
11	Lithuania	21740
12	Cyprus	22730
13	Malta	27330
14	Spain	28180
15	Slovenia	28760
16	Italy	29950
17	Ukraine	5848

When comparing wages in Ukraine and most European countries, it is obvious that the level of wages in Ukraine is significantly lower. Therefore, the proposals of micro- and macroeconomic approaches will be quite relevant compared to foreign experience, which corresponds to the European development trends to which Ukraine aspires.

An increase in wages can reduce the competitiveness of the national economy in the international market, if labor productivity does not increase accordingly. High wages make a country's products less attractive to foreign markets, which can affect the trade balance and economic growth.

## **Conclusions**

The article examines the components of the mechanism for the formation and increase of wages using micro- and macroeconomic approaches. Micro- and macroeconomic approaches are used to form and increase wages, which allows you to regulate the level of wages and achieve the level of European countries. The proposed microeconomic approach in the form of monopsony allows you to regulate the level of wages by regulating supply and demand in the labor market. The proposed macroeconomic approach allows you to reduce the unemployment rate by improving the quality of life.

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## ЗАРОБІТНА ПЛАТА: МІКРО- ТА МАКРОЕКОНОМІЧНИЙ ПІДХОДИ ДОСЛІДЖЕННЯ МЕХАНІЗМУ ФОРМУВАННЯ ТА ПІДВИЩЕННЯ

#### Нікілєва Н.О., Руднєва Л.Л.

Дана стаття присвячена дослідженню мікро- та макроекономічних функції формування та підвищення заробітної плати на ринку праці. Доведено, що заробітна плата, окрім таких основних функцій як: відтворювальна, стимулююча, регулююча, соціальна, формування, підвищення та збалансованості платоспроможної ємності національного ринку, має виконувати ще структурну та захисну. Виокремлено основні підходи та чинники впливу на рівень заробітної плати та запропонований механізм її регулювання, що сприятиме визначенню основних напрямів стабілізації ситуації з оплатою праці в країні. В сучасних умовах заробітна плата не виконує повною мірою жодної функції. Так, для підвищення стимулюючої функції в Україні необхідно задіяти такі фактори впливу як: інвестиційна та інноваційна діяльність, розвиток підприємництва, самостійної зайнятості. Це сприятиме зростанню продуктивності економіки, перегляду життєвих стандартів населення країни у відповідності європейським соціальним стандартам. Низький рівень заробітної плати є основною причиною зростання прихованого безробіття і значного падіння платоспроможного попиту населення. Низький рівень заробітної плати є однією з найголовніших причин тривалого перебування економіки України у кризовому стані. Заробітна плата  $\epsilon$  не лише індикатором, що визначає загальний життєвий рівень працівників. Від її стану та форм реалізації залежить розвиток економіки взагалі досліджено складові механізму формування та підвищення заробітної плати за допомогою мікро- та макроекономічного підходів. На сучасному етапі розвитку економіки України актуальною є проблема оплати праці шляхом впровадження в практику дієвого механізму її регулювання, оскільки економічні процеси, які відбуваються в країні, не сприяють мотивації персоналу шляхом заробітної плати. В зв'язку з інфляційними процесами та постійним знеціненням вітчизняної грошової одиниці заробітна плата перестає виконувати свою основну функцію — відтворювальну. Економічне піднесення в країні неможливе без підвищення результативності праці, яке не може бути досягнуто без посилення стимулюючої ролі заробітної плати. Застосовано мікро- та макроекономічні підходи для формування та підвищення заробітної плати, що дає змогу регулювати рівень заробітної плати та досягнення рівня європейських країн. Запропонований мікроекономічний підхід у вигляді монопсонії дає змогу регулювати рівень заробітної плати шляхом врегулювання попиту та пропозиції на ринку робочої сили. Запропонований макроекономічний підхід дає змогу скоротити рівень безробіття шляхом підвищення якості життя.

**Ключові слова:** заробітна плата, монопсонія, робоча сила, безробіття, зайнятість, ринок досконалої конкуренції, пропозиція робочої сили, попит на працю.

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This article is devoted to the study of the micro- and macroeconomic functions of the formation and increase of wages in the labor market. It is proved that wages, in addition to such basic functions as: reproductive, stimulating, regulating, social, formation, increase and balance of the solvency capacity of the national market, must also perform structural and protective functions. The main approaches and factors of influence on the level of wages are identified and a mechanism for its regulation is proposed, which will help determine the main directions of stabilizing the situation with wages in the country. In modern conditions, wages do not fully perform any function. Thus, to increase the stimulating function in Ukraine, it is necessary to use such factors of influence as: investment and innovation activity, development of entrepreneurship, self-employment. This will contribute to the growth of economic productivity, revision of living standards of the country's population in accordance with European social standards. The low level of wages is the main reason for the growth of hidden unemployment and a significant drop in the solvency demand of the population. The low level of wages is one of the main reasons for the prolonged stay of the Ukrainian economy in a state of crisis. Wages are not only an indicator that determines the general standard of living of workers. The development of the economy in general depends on its condition and forms of implementation. The components of the mechanism for the formation and increase of wages using micro- and macroeconomic approaches have been studied. At the current stage of the development of the Ukrainian economy, the problem of remuneration for labor by implementing an effective mechanism for its regulation is relevant, since the economic processes taking place in the country do not contribute to the motivation of personnel through wages. Due to inflationary processes and the constant depreciation of the domestic currency, wages cease to fulfill their main function - reproduction. Economic growth in the country is impossible without increasing labor productivity, which cannot be achieved without strengthening the stimulating role of wages. Micro- and macroeconomic approaches have been applied to the formation and increase of wages, which makes it possible to regulate the level of wages and achieve the level of European countries. The proposed microeconomic approach in the form of monopsony allows you to regulate the level of wages by regulating supply and demand in the labor market. The proposed macroeconomic approach allows you to reduce the unemployment rate by improving the quality of life.

**Keywords:** wages, monopsony, labor force, unemployment, employment, perfectly competitive market, labor supply, labor demand.

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