

**ABSTRACT**

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**The Dependence of the Average Salary on the Level of the Minimum Salary Set by the State**Associate Professor **Shyfrina N. I.**<sup>1</sup><sup>1</sup>Simon Kuznets Kharkiv National University of Economics, Ukraine**Background:**

Salary in modern business conditions is one of the key parameters of the costs of enterprises and organizations. It is known that in the presence of equilibrium in the labour market in the country there is no excess of the natural rate of unemployment, i.e. the demand for labour is equal to its supply. Under these circumstances, an important element of macroeconomic policy is government regulation of the minimum salary, an unjustified increase in which can lead to an increase in both unemployment and supply inflation, due to forced increases in costs.

*The purpose of the study* is to build a regression model for calculating the dependence of the average salary on the level of the minimum salary set by the state.

**Methods:**

The methods of the rows of dynamics analysis are used to determine the input parameters of the study; methods of regression analysis to identify the dependence of the average salary on the level of the minimum wage set by the state.

**Results:**

There is an unjustified increase in salaries in recent years in Ukraine due to an increase in their minimum level, above the growth rate of prices and reduced productivity; significant labour migration, which is the cause of labour shortages. The negative consequence of these processes is also the dependence of inflation on the growth rate of average wages, the multiplier of which is equal to  $-0.55$ :

$$M = \frac{\Delta Y}{\Delta X},$$

where  $M$  – is an average salary multiplier;

$\Delta Y$  – growth of inflation (%);

$\Delta X$  – growth of the average salary (%).

For the purposes of macroeconomic policy, the interest, first of all, the calculation of the dependence of the average salary on the level of the minimum salary set by the state.

For statistical calculations as dependent variables the time rows for the period 2014-2019 the following indicators: minimum and average salaries were used.

Obtaining comparable values for the variables of the regression model was calculated based on determining the growth rate of input parameters with a time lag of six months. This choice is explained by the existence in

the economy of leading and lagging indicators, the last of which is the average salary, which changes in the country is not one-time, but over a period of time.

To determine the dependence of the average salary on the level of the minimum salary set by the state, the regression equation has the following form:

$$S_{av} = a + b \cdot S_{min},$$

where  $S_{av}$  – is the average salary (UAH);

$S_{min}$  – is the minimum wage (UAH);

$a$  – is a free member of the equation,

$b$  – is a regression parameter.

According to the regression analysis, the following equation was determined:

$$S_{av} = 1639.2031 + 1.97359219 \cdot S_{min}.$$

The adequacy of the obtained calculations is confirmed by the value of R-square=0.916112766 (model reliability – 91%),  $F = 98.29 > F_{Table} = 5.12$ , reliability by the level of significance by Fisher's criterion (Value  $F = 3.84E-0.6 < 0.05$ ,  $P$  – Value for coefficients of regression  $< 0.05$ ).

**Conclusions:**

Thus, even a small increase in the minimum salary (for example, by 200 UAH) will lead to a significant increase in the average (by 2.033 UAH), which in turn will increase the price level by 12% (the growth rate of the average salary will reach 122%  $(2033 + 9218)/9218 = 1.22$ ), and the increase in inflation - 12.1%  $(22\% \times 0.55)$ .

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