## **Labor Market (Minimum Wage Rate)**

## Hanie Hatami<sup>1</sup>

<sup>1</sup>Department of Physics, Sharif University of Technology, Tehran, Iran

#### INTRODUCTION

In labour market discussions, one of the most important topics is the wage rate, which has always been the focus of politicians and economists due to its many effects on the welfare of society and the purchasing power of people, the growth of the country, job security, the working environment of the active workforce of the society, etc. Today, countries use many methods to determine this rate, including supply and demand theory, paying power, cost of living, efficiency, etc. Most countries choose the way and method of determining the wage rate using the balance of demand and labour supply for historical reasons and avoiding its risks. However, some new economists believe that this method is not suitable and that the price floor theory should be followed. In this article, we will examine these two and then report and analyze the data collected from the countries that adopted these two methods.

### THEORY OF SUPPLY AND DEMAND BALANCE

The income that is given to the factors of production depends on the price and the amount of their use. Here, to determine their price, a method is suggested that is used to determine the price and quantity of the goods. Therefore, many of the theories that apply to goods are also valid here for inputs, for example, their price and quantity are determined by supply and demand, although the supply and demand of inputs is different from the supply and demand of goods in important aspects.

John Clerk believes that the wages and prices of inputs depend on the final production at the lowest point of productivity of the factor of production, and the company hires workers until the value of his final production is equal to his wage rate. He calls this functional relationship the theory of wage determination. But Marshall disagrees and says that only the demand side of labor cannot determine the amount of wages and the supply side is also important. Also, Hicks believes that the principle of final productivity is not the only factor that determines wages, but it determines the state of labor demand, and the supply side should also be included. According to this view, when supply and demand interact to determine the allocation of resources among different production lines, they also determine the price of inputs used in production.

In this theory, labor force is considered one of the factors of production, which is influenced by the thinking of the market economy. In this theory, at the same time wages and productivity are more correlated, but if the social impact of the amount of payment is also considered, it will become more

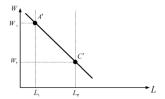


FIG. 1. Diagram 1: Labor demand curve

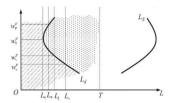


FIG. 2. Diagram 2: labor supply curve

## comprehensive.

Demand side: companies need inputs not for the sake of the inputs themselves, but they demand them as a means to produce goods and services, so the demand for each input is derived from the demand for the goods and services that these inputs produce. In the short term, because there is no opportunity to change all the production inputs, economic optimization regarding the combination of inputs is not possible (the reason for this is mentioned on page 374 of the Microeconomics book 2) and the company is built only based on engineering optimization. The result in the production function by changing the variable input (here labor force) maximizes its profit, that's why in the short term, the amount of capital input is equal to the fixed amount.

In the long term: In the long term, companies select and demand the quantities of inputs by using the production function that includes engineering optimization and by applying the cost equation by performing economic optimization.

Supply-side: at any point in time, the total supply of each production factor is fixed and given, but this supply changes in response to economic and non-economic forces. Sometimes this response is very gradual, such as climate change that turns fertile land into desert, or health improvements that gradually change death rates and increase the adult labor supply. And sometimes it's very fast, like a business boom that brings retirees back into the workforce.

If the worker spends all hours of his time on leisure and does not offer any work, he will not receive income and will be in T (the total time asset of the individual which is fixed). It turns forward, which means that the slope of the demand for leisure

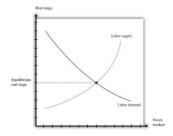


FIG. 3. Diagram 3: The balance of labor supply and demand and the equilibrium wage rate

becomes positive. This improvement does not mean that it is a Giffen because leisure is considered a luxury good and its income elasticity is high. Stated comprehensively, when wages go up, workers are promoted to higher income classes and try to use luxury goods, including leisure, and supply less work. Daily and weekly work hours increase exponentially Countries with high per capita income are based on this concept. After obtaining the labor demand curve and the labor supply curve, by intersecting these two curves, we reach an equilibrium that determines the amount and price of labor.

# DETERMINING THE MINIMUM WAGE AND ABOVE THE MARKET EQUILIBRIUM

The studies and reviews that have been carried out in the context of the goals of determining the minimum wage show that the goal of most governments is to prevent the exploitation of human resources, to raise other wage levels, to eliminate the illegal competition of employers, to ensure rapid growth and fair distribution of national income, which It often contradicts the rate obtained through the market economy. The International Labor Organization has proposed criteria for this purpose. Iran is also one of the participating countries, but it is against setting the minimum wage in this organization. First, before explaining the functions and effects of determining the minimum wage, we will define it in the Constitution of Iran and the International Labor Organization.

- The Constitution of Iran: "The minimum wage, without considering the physical and mental characteristics of the workers and the characteristics of the assigned work, must be sufficient to support the life of a family whose average number is declared by official authorities."
- International Labor Organization: "Minimum wage is
  the amount that is paid to the worker in return for doing
  work or service for a certain time, and no individual or
  collective agreement can reduce it. Its payment is guaranteed by law. And it provides a sufficient livelihood
  for the worker and his family according to the economic
  conditions of that country.

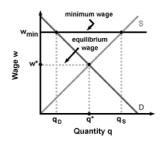


FIG. 4. Diagram 4: The difference between the regular wage and the wage floor

Now the question arises, what is the reason that prevents the determination of the minimum wage rate and why do such questions remain unanswered? To answer this question, we must refer to the effects of the minimum wage on the economy and society. From the point of view of classical economics, any intervention in the market balance will have negative effects on the balance of other economic sectors. The most important effects will be reviewed in this section.

An increase in the minimum wage increases the costs of companies and, as a result, they tend to hire less and fire workers. Also, determining the minimum wage causes the loss of the motivation of semi-skilled and skilled workers. Therefore, there are different solutions to answer the mentioned problems. Mohammad Maljo, an economist in the field of political economy, has presented an opinion about this.

According to current economists, if workers receive more wages than the equilibrium rate, employers, including the private sector, will receive a smaller share. Therefore, the profit margin decreases with the stability of other conditions, and as a result, there is less incentive to reinvest and maintain employment, this determination of the minimum wage rate may benefit some workers who are employed and will remain employed after the determination of the wage rate. This benefit is paid from the share and portfolio of workers who are (or will be) unemployed.

The category of official minimum wage reflects the conflict of interests within the workers' society. However, Mohammad Malju's criticism of such claims is as follows: First of all, it should be noted that the natural phenomenon of increasing unemployment in exchange for determining the minimum wage rate is historical. In the sense that the will and information from the past are effective in its formation. His other criticism shows that the assumptions of economists are completely abstract.

Going out of balance is like setting an unbelievable rate for them. In the sense that an increase of one rial in wages does not cause a significant increase in unemployment, also the purpose of determining the minimum wage is not a very sharp difference from the equilibrium rate to increase the unemployment rate.

A limit between these two hypotheses is the desired goal, in other words, choosing a reasonable amount that is almost ineffective in increasing unemployment between 1 rial increase in

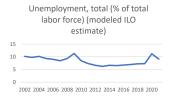


FIG. 5. Diagram 5: Unemployment, total (% of total labor force) (modeled ILO estimate)

the minimum wage rate and 100,000,000 tomans. In this way, the threshold between these two numbers should be found. Such a limit, whatever it is, is influenced by three types of power and arrangement relations.

The first type is between workers and employers, the second is between workers and the government, and the third is between the government and employers. To show the accuracy of this threshold, we can refer to one year after the revolution when the 170% increase in the wage rate increased the unemployment rate to a maximum of a few 100%, but it is noteworthy that today it is the opposite. After the revolution, Iran has witnessed the loss of the workers' power structure concerning the government and employers, which has caused this threshold to be lowered.

The relationship between the private sector and workers has become very weak due to many reasons, such as temporary contracts for workers and contractors, the withdrawal of a large part of labor owners from the protective umbrella of the labor law, and the bargaining power of workers has decreased. Also, a relationship between employers and the government is beneficial to employers. Because most of the government's arrangements are provided by private companies.

#### IS THERE ANOTHER WAY?

In addition to Mohammad Maljo's comments criticizing market economists, there are other reasons for agreeing to set the minimum wage rate. Let's pay attention to this statement: "Increasing the minimum wage will help reduce poverty if the increase in the minimum wage does not reduce employment and does not cause inflation. For this purpose, the increase in wages should be related to productivity and the conditions of the labor market in the countries Consider the competitor.

#### DATA ANALYSIS

In the country of Chile, after the revolution in 2019, leftist politicians came to work and as we can see after that unemployment decreased and GDP increased.

[1] J. E. Alt, American Political Science Review 79, 1016 (1985).

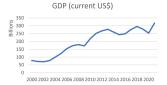


FIG. 6. Diagram 6: GDP (current US\$)

- [2] T. Wobbe and L. Renard, Journal of Global History 12, 340 (2017).
- [3] A.Shakeri, in microeconomics2.
- [4] E. Maljou, in *Podcast of the eighth meeting of the Institute of Interdisciplinary Cooperation Now.*
- [5] S.M.Askari, Monthly social, economic, scientific and cultural work and society..