# Section 4: The Causes of Unemployment

In this section, the causes of unemployment will be discussed in detail.

As mentioned in Lecture 9, there is only one direct cause of unemployment: the wage is higher than the equilibrium determined by the market, which is acknowledged by all economists. But why is the wage too high? Why is the wage not adjusted downwards? In other words, why is there “Wage Rigidity”?

Some policies of government are of course one of the most important reasons. (1) The minimum wage law directly abolishes the price adjustment mechanism in the labor market to eliminate unemployment by lowering wages. There are also policies such as requiring firms to bear part of social insurance benefits, which objectively force them to raise wages, thus cause them to reduce employment or even dismiss employees. (2) The trade unions have administrative monopoly power, and they strive to raise the wages at the expense of decreasing the employment. (3) The social welfare objectively encourages people not to work. If welfare benefits are higher than wages, self-interested people naturally choose not to work, which is logically similar to the choice of voluntary unemployment, but different in that the voluntary employed enjoy leisure on their own money, while the welfare recipients on the taxpayers’ money. Moreover, government will not regard voluntary unemployment as unemployment, while the welfare recipients need to prove that they are unemployed.

Besides the government policies that will cause unemployment, there are other reasons for wage rigidity. The “Efficiency Wage Theory” argues that it is the firm that deliberately raises the wage above the equilibrium, because on the one hand high wage will make the employees devote to working in a better state, and on the other hand, it will create unemployment that frightens the employees not to shirk. This explanation seems to be reasonable and is logically similar to the strategy that the iPhone is deliberately priced lower than the equilibrium, which creates the queuing of buyers with advertising effect.

However, the efficiency wage theory is refuted by facts. When there is economic recession, there will be an increase in unemployment, because the difference between the wage and the equilibrium has increased. Economic recession will cause the demand for labor decrease, so the equilibrium of wage will also decrease as long as the supply of labor is unchanged. Even if the wage remains unchanged, the difference between the wage and the equilibrium will increase. According to the efficiency wage theory, it is enough that the wage is higher than the equilibrium, and there is no need to increase the difference between them in economic recession. In other words, the efficiency wage theory can explain the unemployment caused by the wage higher than the equilibrium, but it cannot explain the increase in unemployment caused by wage rigidity (the wage cannot fall) in economic recession.

The correct explanation still relies on the constraint that there is transaction cost (mainly information cost). Unemployment is usually divided into the following kinds: frictional unemployment, structural unemployment and cyclical unemployment.

Frictional unemployment occurs when one quits the old job and looks for a new one because he needs to take some time to find a new job. This kind of unemployment is obviously caused by information cost. Frictional unemployment will not last for a long time. As time goes by, the information cost will drop and this kind of unemployment will disappear. In fact, frictional unemployment is not an economic problem that government is worried about. In the market there are job-hunting agencies and headhunters to reduce the information cost.

Structural unemployment refers to the phenomenon that there are vacant positions and the unemployed at the same time. For example, there are many vacant positions in less developed areas, but few are willing to apply for those jobs, and most unemployed prefer to stay in developed areas. Of course, as long as the wage in less developed areas is high enough, this kind of regional structural unemployment can be eliminated. However, another kind of structural unemployment is more difficult to eliminate. There are many vacant positions in sunrise industries like IT, but the unemployed often appear in declining and shrinking sunset industries. Those unemployed do not have the appropriate skills to engage in new occupations. Although the wage of the vacant positions is very high, they are just beyond their reach. This kind of unemployment is caused by the adjustment of industrial structure. Re-employment training can solve the problems to some extent, but for the old unemployed who are difficult to learn new skills, they can only accept the wage reduction to stay in the old industry or turn to the similar industries with low wage but low skill requirement. In any case, as long as the wage can be flexibly lowered, those with low skill will not lose their jobs. Structural unemployment is due to the difficulty of matching the location or skill of the labor and the job, so the reason for it still lies in transaction cost.

The so-called cyclical unemployment is the concern of the government’s macroeconomic policies. As has analyzed in Lecture 19, as long as there is no problem with monetary policy, there will be no business cycle. And even if there is business cycle, as long as there is no interference of the government policies on the labor market mentioned above so that the wage can be flexibly lowered, there will not be serious unemployment for long.

As mentioned in Lecture 19, gold had been used as money (gold standard) for thousands of years and had done a good job. However, strictly speaking, the gold standard is not the best monetary system because gold is not a good. It had done a good job as money just because it cannot be easily overprinted. In the long ancient time, the economic growth was very slow, and the gold supply also increased very slowly, so the growth rate of them could match with each other. However, since the industrial revolution, the economic growth rate has been significantly faster than that of gold, which implies that the gold standard will cause deflation. In fact, there was indeed severe deflation in Britain during the industrial revolution. But why was there not as serious unemployment and economic recession in Britain during the industrial revolution as that in the US during the Great Depression? Instead, during the industrial revolution, there was rapid economic growth in Britain. The reason is simple that there were no “evil laws” such as the minimum wage law, trade unions and social welfare that interfered with the labor market. Deflation will cause a drop in the prices in the product market, but the prices in factor market (including wage of labor) also drop, so firms can keep their profits and continue to operate. What is more, with the technological progress brought about by the industrial revolution, firms can obtain more output with less input, which is also helpful to fight against deflation.

There was a similar case in China from 1996 to 2000. There was no minimum wage law and very little social welfare in China, and the contract of piece-rate and share contract (dividends, bonuses) were widely used, which could automatically lower wages along with the economic recession with the greatest flexibility. As a result, deflation did not cause long-term unemployment, nor did it cause serious economic recession. Instead, it was a helpful pressure for firms to fight against deflation by improving quality and technology of products. In fact, the quality of products had improved significantly during that period, which laid the foundation for the products “Made in China” to conquer the whole world, especially after entering the WTO in 2001.

As mentioned in Lecture 13, if all production factors are purchased or rented through sharing contracts, there will be no unemployment, because the income (wage) of labor will decrease along with the decrease of the firm, and there will be not any rigidity. In fact, the unemployment rate in Japan has been much lower than that of western developed countries, and the “lifetime employment system” is attributed to. However, the correct explanation is that in Japan’s wage structure, there is a very low fixed wage as the base salary, and the rest is mostly performance-related bonus that is essentially sharing wage. When the income of the firm declines, the wage of the employees can be flexibly lowered, so there is little need to dismiss the employees. In other words, the lifetime employment system is not the cause but the result of low unemployment. This explanation can be tested by the fact that since 1990 when Japan’s economy has been in a long-term recession, the income of some firms dropped sharply, even below the base salary (fixed wage), so there were a large number of dismissals, resulting in an increase in the unemployment rate. The lifetime employment system was easily abandoned. If all wages were sharing wages, the firms would not fire the employees even if the income dropped to zero, because they then used the labor for free. Of course, it was more likely that the employees would choose job-hopping.

The contract of piece-wage will neither cause unemployment. Under the contract of piece-wage, the factor market is inseparable from the product market, so the information of the price paid by final consumers is directly transmitted to the self-employed through the middlemen. As the price of product falls, the piece-wage must follow. If the self-employed do not accept the wage cut, the products cannot be sold out, not because the middlemen refuse to buy, but the consumers refuse to buy. What is more, the self-employed work for themselves, there cannot be unemployment.

It is the contract of time wage that will cause wage rigidity and unemployment. What the manager really wants is not the working hours of the employees, but the outputs produced during the working hours. Just because the transaction cost of directly measurement is too high, time is entrusted to indirectly measure the products. If the productivity of the firm declines, which indirectly implies that the time value of labor also declines, the time wage should be reduced. However, it is difficult to persuade the employees to accept the wage reduction precisely because it is indirect implication. Employees will argue that they work as hard and efficient as before, which means the quality of labor has not changed, why should the time wage be reduced just due to the economic recession? It sounds very reasonable, but the firms can argue similarly. The quality of the products has not changed, but now there is economic recession, and the demand for the products decreases, so the price has to be reduced.

The price of production factor is determined by that of product, which is always true even if the factor market is separated from the product market. When there is economic recession, the pressure of price reduction in the product market will be transmitted to the factor market. Just when the factor market is not separable from the product market, the suppliers of production factor and that of product are either the same individuals, or under the pressure directly, so the root of the price (or wage) reduction is clear and are easily accepted. By the contrast, when the factor market is separated from the product market, which means the contract of wage is time wage, the suppliers of product are directly under the pressure of price reduction, while the suppliers of production factor (employees) are indirectly under the pressure, so the root of the wage reduction is not clear, and the employees will tend to refuse to accept it. Obviously, it implies that the information cost in the latter case is higher than that in the former case.

Furthermore, time wage is fixed wage that cannot be adjusted in principle during the contract term, so it cannot be lowered along with the decline in the income of the firm during the contract term, thus forming wage rigidity. Of course, the contract can be terminated in advance, so in reality if the transaction cost of terminating the contract is lower than that of negotiating wage adjustment, the firm will prefer dismissal to wage reduction. The question then becomes: why do employees not accept wage cut but rather dismissal? It is logically similar to this question: why do the unemployed not accept a lower-paid job but rather remain unemployed? Social benefits such as unemployment benefits provided by government will certainly encourage people to choose unemployment instead of accepting wage cut (especially if the wage is reduced to be lower than unemployment benefits), but the cause of government intervention is not taken into account for the moment.

The reason is still the information cost. In the economic recession, even if the unemployed know that their wages need to be reduced, the problem is that they do not know how much to reduce, which means the information about equilibrium wage is sometimes not so clear in reality. If those with similar skills get the same wage, this information is not difficult to know. The unemployed will know clearly how much they should get when they observe the wage of those who with similar skills are still employed. It is logically similar that a seller of vegetables observes how much the other sellers price their vegetables in the market. However, if for some reasons those with similar skills get very different wages, it will be very difficult for the unemployed to judge what the equilibrium wage is.

Why do people with similar skills get very different wages? Firstly, those like civil servants seldom lose their jobs, and neither is there wage cut due to the economic recession, which makes their wages out of line with their skills. What is more, when there are those like civil servants who do not reduce wages during the economic recession, the others have to reduce more wages to achieve the overall equilibrium. For example, there needs to be a 10% of wage cut due to the economic recession, but 1% of the labor force are civil servants and will not reduce their wages, so the remaining 99% have to reduce their wages by 10.1% ($=\frac{10%}{99%}$) instead of 10%, which means the 99% have to share the part of wage cut of the 1%.

Secondly, as mentioned in Lecture 9 of the analysis on the minimum wage law, when there is economic recession, the firms will not immediately fire the employees, but cut the recruitment of new staffs and reduce wages in disguised form by increasing labor intensity for the employees. The wages of the employees seem to have not dropped, which will mislead the unemployed to think that they can find the same jobs as before, but in fact they are difficult to do so because the firms have cut the recruitment of new staffs. If government adopts the policies such as “dismissal compensation” that increase the transaction cost of dismissal, the firms will become more prefer to cutting the recruitment of new staffs rather than dismissing the employees, so the unemployed will be more seriously misled, implying an increase in information cost.

In a word, due to the wrong policies of government and some other constraints, those with similar skills have different wage rigidity, which increases the variance of wages and causes an increase in the information cost for the unemployed to correctly judge the equilibrium wage, and it in turn increases wage rigidity and causes more unemployment.

The definition of unemployment has been discussed in Lecture 9, which concludes that the only direct reason to unemployment is that the price (wage) of labor is too high. But why is the price of labor too high and not reduced? Besides the “evil policies” such as the minimum wage law and trade unions that directly prohibit the decline of wages, the other important reason is the information cost on the equilibrium of wages.

In fact, it is logically similar for the “unemployment” of other production factors. For example, it is well known that it takes a rather long time for a house to be sold out. The house is in idle before it is successfully sold out, which can also be regarded as “unemployment”. Because the quality of a house is relatively complicated, including the quality of the building, design and even the location. Therefore, the information on whether the qualities of different houses are the same and whether the prices can be comparable to determine the equilibrium prices is rather higher than that of other goods. In addition, people are willing to spend more time searching for relevant information because the price of a house is usually high enough to burden very high information cost.

Turing from a house to a stock, there is no stock that cannot be sold out, but only the sharp drop in the stock price, which implies that as long as there is no difficulty in lowering the price, any good can be sold out.