Employment and Unemployment in Europe. Factual and Theoretical Developments

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Abstract

The employment and unemployment approach has taken several steps, starting with the neoclassical theories of unemployment and ending with modern labor market theories. In this article, we aim to highlight the factual and theoretical developments in employment and unemployment in Europe.

Key words: labor market, unemployment
J.E.L. classification: J21, J31, J64

1. Introduction

The first step regarding the evolution of the unemployment concept was represented by the neoclassical theories, according to which unemployment was either temporary, determined by the adjustment of supply on demand or voluntary unemployment when workers did not accept to work on a lower salary than the one expected.

The second stage was Keynesian theory, which brought some theoretical changes to neoclassical models. Thus, in Keynes opinion, the labor market does not operate according to the same principles as the goods and services market where price is formed by the confrontation between supply and demand, since labor is not a commodity whose price can be set strictly commercially.

Another stage in the evolution of unemployment theories is the Phillips Curve and Okan's law. The contribution of Milton Friedman, who reformulated Phillips's original attitude, has not been omitted, bringing the concept of the natural rate of unemployment into question. Friedman promotes the idea of a natural rate of unemployment, below which unemployment can never fall, regardless of the monetary policies applied.

There are also more recent theories on unemployment, namely the differentiated wage theory developed by Burdett and Mortensen and the theory of efficiency wages proposed by Shapiro and Stiglitz.

2. Theoretical background: Neoclassical theory of occupation and unemployment versus Keynesian theory

From the end of the Second World War to the late 1960s, unemployment in Europe was at an extremely low level. In the 1920s, on the backdrop of classical and neoclassical liberal theories, Great Britain, like many other capitalist states, faces an economic depression and high unemployment. The Great Depression from 1929 to 1933, which struck the major capitalist economies, determined theoretically the emergence of a new economic trend, namely "Keynesianism" or "interventionism", as is already known in the academic world.

This new economic doctrine, developed by British economist J.M. Keynes, explains the high unemployment rates that destroyed Western economies in the 1920s and 1930s, thus opposing the classics (beginning with Ricardo) and the neoclassicals (Walras, Jevons, Menger) who had promoted the idea that a free market, whereby the state will not intervene, will ensure an optimal allocation of production factors in the economy, generating economic growth and full employment.

Keynes explains the economic crisis of the late 1920s and unemployment through a reduction in consumption that led to a low aggregate demand resulting in reduced production. Thus, in order to ensure economic growth and full employment, Keynes supported the idea of state intervention in the economy (Keynes, 2010).

As far as the labor market is concerned, Keynes brings some theoretical changes to the neoclassical models that treat the labor market as a distinct market with the rest of the markets, considering that equilibrium is the same as any other market by matching demand with supply so that labor supply will always be adjusted to demand by price variation. Specifically, neo-classics considered that any individual who wants to get a job can have it if he accepts a lower salary, just as on the goods and services market any bidder can find a customer for his products or services if he reduces the price. In the neoclassical view, unemployment was either transitory, driven by the adjustment of supply on demand, or voluntary unemployment, when workers did not agree to work on a lower wage than expected. Thus, neo-classics believe that when workers accept lower wages, full employment can take place and the labor market is in balance.

In Keynes's view, this is not possible, the explanation being that what is being negotiated is actually the nominal salary, and a reduction in it will have no practical effect, as a similar variation of prices in the economy so that real wages and unemployment will not change. Keynes also breaks away from neoclassical theory as to the cause of unemployment, which is not the will of workers who do not accept lower wages, but the decisions of firms that can be in the direction of expanding activity, which implies an increase in jobs offered or, on the contrary, a restriction of activity, which means the abolition of jobs. Thus, according to Keynes, the labor market does not operate according to the same principles as the goods and services market where price is formed by the confrontation between demand and supply, since labor is not a commodity whose price can be set strictly commercially. The Keynesian theory theory is the aggregate demand principle, according to which the level of employment depends on the level of aggregate demand for goods and services, unemployment being the result of an insufficient aggregate demand.

Regarding the balance on the labor market, there are major distinguishes between Keynes and Neoclassics. Unlike neoclassicals who treat the labor market independently, considering work as any other commodity whose price is in balance when labor demand corresponds to labor supply (for example, Solow-Swan's exogenous economic growth model), Keynes considers that markets are interdependent, and the labor market depends on the goods and services market and the money market, whose equilibrium will in turn generate a balance in the labor market (for example the Hicks-Hansen IS-LM model). Thus, by confronting the two curves, IS and LM show the equilibrium production value, which corresponds to a level of occupation, which will ensure the equilibrium of the labor market.

According to Keynesian theory, labor demand is derived from the actual demand for goods and services, which in fact is the demand a company expects to address, depending on the function of income from the economy, the rate of taxation, the interest rate, the average inclination consumption, capital efficiency, etc.

3. Two theories of the unemployment rate: Okun's law and the Phillips Curve

Both Okun's law and Phillips Curve have been debated and analyzed over time in the work of many economists.

The Phillips Curve has been particularly important among theoreticians and policy makers in particular because it describes an inverse relationship between inflation and the unemployment rate, considering that an increase in employment will result in an increase of demand for goods and services, so it will produce inflation, while monetary policy measures, anti-inflationary, will generate unemployment.

Thus, taking into account the relationship described by the Phillips Curve, governors will have to harmonize monetary policies specific to central banks in each country that aim to keep inflation below a certain acceptable level (3% in the EU), with the rest of the government's macroeconomic policies which usually aim for economic growth and full employment, which means that unemployment is close to its natural rate.

The relationship between the labor market and monetary policy, which has theoretically the empirical relationship highlighted by Phillips, has been the subject of many research over time, among which the research by Cooley and Quadrini (1999). They have explored the source of the link between the labor market and monetary policy, combining a theoretical model of job creation and abolition (Mortensen - Pissarides model, 1994) with an economic model of money transmission (Christiano, Eichenbaum, Evans, 1996, 1997), showing how aggregate monetary shocks affect the flow of workers and jobs.

The Phillips Curve has been tested on the economies of many countries, in many cases the results denouncing the relationship discovered by Phillips, which is why a number of neoclassical currents, including Lucas and Sargent, fought the Phillips curve, rejecting Phillips Curve theory.

Neither Okun's relationship, which implies the existence of a reverse relationship between the dynamics of gross domestic product in an economy and the change in unemployment, is not supported by all economists.

Okun has shown that a 1% reduction in unemployment results in an increase of about 3% in GDP, but nowadays Okun's law is known to mean that a 1% reduction in unemployment will generate additional growth of GDP by 2% above its potential, estimated to be 3.2 percent. Any additional GDP growth above its potential level of 3.2% will result in a 0.5% reduction in unemployment.

However, the reverse relationship between the change in unemployment and GDP is not constant over time, and implicitly, the potential GDP figure of 3.2 percent does not remain the same. Okun's relationship thus becomes a recommendation rather than an immutable law. The explanation is that the GDP of an economy does not depend directly on the unemployment rate, but depends primarily on the available labor force (Altig, Fitzgerald, Rupert, 1997, p. 1-6).

The conclusion is that Okun's relationship can only be considered as a recommendation, as potential GDP does not remain constant over time, and changes in unemployment and GDP rates do not maintain an inversely proportional ratio of ½.

The relationship between unemployment and GDP growth was also tested in Romania. A study in this sense is done by Dinu et al. who tested Okun's relationship for the 1999-2008 period, resulting in a correlation of -0.26 between the unemployment rate and the change in GDP, relatively close to the Okun coefficient (-0.3). The resulting coefficient for the period 1999-2008 is higher than that resulting from testing the same relationship for the period 1992 - 2004 (-0.17). The increase in the coefficient is explained by the economic growth registered by the economy of our country during the period 2004-2008 as well as by the reduction of the rigidities on the labor market during the same period (Dinu M., Marinaş M., Socol C., Socol A., 2011, p. 5-20).

4. Natural Unemployment Rate

As mentioned above, from the end of the Second World War to the late 1960s, unemployment in Europe was at an extremely low level. Since the 1970s, most of the capitalist economies of the world have seen unemployment rise, which continued in the 1980s, stabilizing at a high level in the 1990s. It has remained high until today when unemployment hides a degree high heterogeneity among the economies of European countries.

The 1970s, when unemployment began to rise, coincided with the emergence of the concept of "natural rate of unemployment" but not operational at that time (Blanchard, 2005, p. 1-53). Through a graphical representation, Blanchard has shown that when unemployment is below natural rate, inflation will tend to grow, and when unemployment is above natural rate, inflation will tend to fall. European countries faced two major oil price spikes, the first being in 1973-1974, with the oil embargo imposed in the Arab countries and the second period of oil price rises being the period the Iranian Revolution of 1979 and the Iran-Iraq War of 1980.

Since the early 1970s did not yet have a natural rate model, economists could not predict stagflation in the 1970s. A functional model of the natural rate only emerged in the late 1970s, and since then stagflation has been much better understood. The rise in unemployment was explained by the interaction between adverse shocks and the structure of collective bargaining in each country.

The dynamics of capital accumulation was also one of the causes that led to a long and profound increase in unemployment. In this context, the expansionary monetary policy has played two major roles. Firstly, it helped lower real wages and limit the reduction in unemployment to an existing stock of stocks, and secondly it played an important role in reducing the real interest rate, thereby limiting the decrease in capital accumulation, which had as a result, a reduction in unemployment over time. Both monetary policy implications functioned in the second half of the 1970s when inflation ceased to grow.

As I pointed out in the previous paragraph, according to the Phillips curves of the early 1960s, the increase in the nominal salary demanded by people depended solely on the level of unemployment. Phillips noted that from an econometric point of view there was a close correspondence between the nominal wage exchange rate and the inverse of the unemployment rate on UK data over 97 years between 1861 and 1957. However, in the US in the late 1960s and in the early 1970s, both inflation and unemployment increased, and it seemed to contradict the compensation situation between the two rates Phillips had found. Moreover, this analysis by Phillips contains a fundamental error in that no distinction is made between the nominal and the actual salary, just as Wicksell has failed to distinguish between the nominal and the nominal interest rates (Friedman, 1968, p. .307).

The theory was accepted until the later tests of the Phillips curve no longer corresponded to the initial results, as there was a need to accept an increasing rate of inflation to keep unemployment at an acceptable level. This is how Phillips's initial postulated relationship was later reformulated by Milton Friedman and Edmund Phelps (1968), which questioned the existence of a natural rate of unemployment, under which unemployment would never be able to fall, regardless of monetary policies I'm getting. Friedman changed Phillips's theory by saying that employees were actually negotiating the real salary, not the nominal salary, which would have attracted the illusion of money. This means that, in addition to the salary increases that people claimed at a certain level of unemployment, if the expected inflation was zero, they would add to their expectations of the inflation rate. Thus, the concept of the "natural rate of unemployment" has emerged, denoting that level of unemployment at which inflation will not change.

In short, macroeconomists, until Friedman, believed in the relationship between price changes and unemployment without inflationary projections having any effect. Friedman understood that such a theory could only apply if those who set the prices and wages had the illusion of money, or if they fail to add inflationary forecasts to wage bargaining and pricing. Friedman has altered the relationship so that wage and price equations are affected one to one by inflation expectations. In these conditions, unemployment will remain around the natural rate (Friedman, 1968).

Classical economic theory is based on the principle that there is no unemployment, which means that in a situation of balance, all individuals who want to work can find a job. However, the classical economic model, developed by Milton Friedman, believes that in any economy there is a certain level of unemployment, called frictional unemployment, due to fluctuations in the labor market. Frictional unemployment refers in particular to the temporal unemployment that occurs when individuals are between two jobs, ie the time elapsed between the moment when they change, willingly or not, a job with another (Friedman, 1968).

The concept of natural rate of unemployment has deeply penetrated economic theory and is almost unanimously accepted by economists, which is why later studies have taken over this syntagm and have developed it, so today is the "NAIRU estimation" (Non accelerating inflation rate of unemployment, a concept that defines that level of unemployment that corresponds to stable inflation. Between Friedman's original concept of "natural rate of unemployment" and "NAIRU", model developed by neokeynesians, there are some differences that are related in particular to the existence of imperfect competition on the labor market. In the NAIRU model, the negotiated salary increases as employment increases, because increased employment involves fewer unemployed people looking for work, so a lower job offer, which translates into greater bargaining power on the

part of the trade unions (Dobrescu , Paicu, Iacob, 2011, pp. 186-201).

But there are also opinions contrary to Friedman's natural poverty theory, which suggests that salary indexation decisions are not affected by the illusion of money. For example, Akerlof and Shiller argue that some wage indexation has been affected by the illusion of money, which is less than one to one, and others have taken place only after inflation has risen to a specified level. They conclude that inflationary expectations are unlikely in wage negotiations and provide evidence for the existence of money illusion in wage and price setting. For example, fixed-interest-rate government bonds or even fixed-interest mortgages (Akerlof, Shiller, 2010).

According to Akerlof and Shiller, the natural rate theory is generally appealing, but it is based only on one assumption that people do not have the illusion of money. An example of the existence of the illusion of money is the rigidity of wages to their downward trend. This means that employees are opposed to any reduction in wages, which means that wages will not fall even if inflation is reduced. In this case, salaries will become higher as the level of employment does not change. Under these conditions, the increase in wages caused by the reduction in inflation will influence unemployment in the direction of increasing it by double the inflation reduction percentage as it results from the Phillips curve (Akerlof, Shiller, 2010, p.188).

5. Two Theories of Salary: Efficiency Wage Theory and Differentiated Wage Theory

Wage efficiency theory. Another interpretation of Keynesian involuntary unemployment

There are more recent theories about unemployment. These theories include the theory of efficiency wages. From the point of view of the formation of the labor price and of the salary offered by the employer to the employee in return for the labor, the labor market differs from the other economic markets, namely the financial market or the market of goods and services where any seller can sell a product or performs a service through a reduction in the price or tariff originally requested.

The labor market is atypical in this respect because the employer will not be willing to hire a work force against a low salary if the employee is not fully satisfied with the salary received in order to perform his / her duties with the utmost responsibility and in an efficient way. No employer wants his employees to come to work and not to provide the expected return or to get away from work.

The theory of efficiency gains is based on Phelps (1970 and 1994) and continued by a number of economists including: Solow (1978) who believes higher wages will bring extra effort from employees, Shapiro and Stiglitz (1984), who developed the idea that high wages discourage employees from escaping from work, as they cannot be very well monitored and Weiss (1991) who believe that a higher salary will attract skilled labor and with superior training.

The theory of efficiency gains, developed by Carl Shapiro and Joseph Stiglitz, promotes the idea that employers might be willing to offer a higher salary to their employees than the lowest salary that workers would be willing to accept because of the effect which the salary has on the employees' mood, directly influencing the labor efficiency. In the view of the two economists, a higher salary could reduce the company's costs by overseeing employees so that they do not shirk from work. In order not to do so, all firms will increase wages so that employees are further stimulated and not shirk from work (Shapiro, Stiglitz, 1984, pp. 433-444).

In these circumstances, there will be a gap between demand and supply in the sense of an offer of labor above the demand that will give rise to unemployment. This type of unemployment is considered by the two economists to be involuntary unemployment. In their view, involuntary unemployment represents the gap between supply and demand at the salary level that firms are willing to pay (Akerlof, Shiller, 2010, p. 172).

The theory of differentiated salaries

We know that workers, even if they have the same skills and abilities and do the same job, can benefit from different salaries, depending on the employer where they work. An explanation for this is provided by Burdett and Mortensen (1998). They argue that persistent wage differences are influenced by the strategic way in which wage formation is formed in a frictional labor market and where there is no homogeneity between workers and jobs. On such a market, workers are

constantly looking for a job, so those who are unemployed can accept a job with a lower salary and those who already have a job are looking for one better paid. The job offer is thus confronted with the demand for employment, represented by employers who publish job vacancy announcements and salary offer, depending on the salaries offered by other companies for similar jobs. Thus, the already employed workforce can migrate to employers offering higher wages, whereby labor supply determines the profits of each firm and is conditioned by the wages offered by other employers and the salary demanded by employees. This profit function is actually rewarded in the "payroll" game played by employers.

Burdett and Mortensen have shown that wage dispersion exists in a balanced market even when workers offer the same labor productivity. They mentioned three consequences stemming from this simple version of the model, namely: (Burdett, Mortensen, 1998, pp. 257-273)

- in the best paid jobs, there will always be more experienced and better trained workers;
- there is a direct relationship between the size of the workforce and the salary paid;
- there is an reverse relationship between the salary offered and the migration rate between employers.

6. Conclusions

We can conclude that the evolution of employment and unemployment theories have been linked to the stages through has passed the economy of major capitalist states.

We have seen how the *Keynesian* theory came to explain the high rates of unemployment in the 1920s and 1930s, as classical and neoclassical theory had failed.

The next period of high unemployment was in the 1970s and 1990s and coincided with the emergence of the concept of "natural rate of unemployment".

Another conclusion drawn from this paper is that the labor market is atypical to the rest of the economic markets, where supply meets demand when the price is reduced. In the labor market, the employer can offer a higher wage for the employee to perform the work with maximum responsibility and involvement.

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