

## UNEMPLOYMENT AND THE ENTREPRENEUR

Adil Mouhammed, University of Illinois at Springfield

---

### ABSTRACT

This paper aims at analyzing the problem of unemployment and the role of the entrepreneur in reducing the rate of unemployment through innovations. Having reviewed the basic theories of unemployment, the paper explains the role of the entrepreneur as developed by Schumpeter in reducing the rate of unemployment. Not surprisingly, unemployment can be reduced over the course of the business cycle but cannot be eliminated under capitalism, because a low rate of unemployment will increase wages and power of the working people.

**Keywords:** *Frictional unemployment, Mismatch, Outsourcing, Effective demand, Innovations.*

---

### 1. INTRODUCTION

Unemployment is measured by the ratio of workers unemployed to the labor force. For economists, the unemployed is a person who is willing and able to work at the going wage rate but cannot find a job. Unemployment may be a voluntary or involuntary. Voluntary unemployment describes a person who has decided to be out of the job market for a variety of reasons such as looking for a better job, taking a vacation, etc. Voluntary unemployment increases individual contribution to the economy, as the individual is trained more during the duration of the unemployment. Involuntary unemployment describes a worker who is willing and able to work but cannot find a job. Various causes explain this type of unemployment such as the deficiency in effective demand, incompatible skills with what the markets need, market imperfection, to mention a few.

Unemployment generates a loss of Gross Domestic Product (GDP), poverty, criminal activities, budgetary problems, human capital problems, inequality in income distribution, and mental health. For these reasons policy makers have studied this problem and designed various policies such as macroeconomic policies (fiscal and monetary), labor

market policies, education, and training for solving this problem.

The U.S. unemployment rate had been declining since 2002 but has been increasing since the last quarter of 2007, when the Great Recession had occurred. Currently, the rate is at 9.7 percent. The unemployment rate has been associated with the housing crisis, bankruptcy of several banks and firms, higher oil prices, inflation, and two wars in Iraq and Afghanistan. Most important, when the unemployment is associated with a high inflation rate, the stagflationary condition of the 1970s comes in mind. That condition was also associated with higher oil prices and the Vietnam War.

The purpose of this paper is to review the dominant theories of unemployment in section two, and section three is devoted to explain the theory of employment implicitly developed by Joseph Schumpeter. Schumpeter's theory is considered the most important theory for explaining and reducing the unemployment rate, because within the globalized capitalist economy innovation is the most important element for increasing employment and generating prosperity. A summary and conclusions are provided in the last section. The important conclusion is that without

innovations introduced by the entrepreneurs, the rate of unemployment cannot be reduced significantly in the long run.

## 2. A REVIEW OF THE DOMINANT ECONOMIC THEORIES OF UNEMPLOYMENT

The dominant economic theories of unemployment consist of theories that are embraced by the most dominant schools of political economy. The classical theory, as analyzed by Pigou (1933) and Solow (1980), argues that the labor market consists of demand and supply of labor. Demand for labor is a derived demand obtained from the declining portion of the marginal product of labor. The demand curve is a negative function of the real wage in that if real wages increase the quantity demand for labor will decline, and the opposite is correct. The supply of labor is derived from worker's choice whether to spend part of their time working or not working (leisure). Supply of hours worked is a positive function of the real wage, because if the real wage rises, workers supply more hours of work. In equilibrium, demand and supply of labor are intersected at a clearing point that determines the equilibrium real wage rate and full employment. Unemployment, Sweezy (1934: 807) explains Pigou's *Theory of Unemployment*, "apart from frictional obstructions...would be nonexistent if it were not for the fact that wage-earners habitually stipulate for a rate of wages higher than the 'equilibrium' level."

Full employment does not mean that there is no unemployment. Still frictional unemployment does exist at the going real wage rate. For example, if a worker thinks that the disutility of work is greater than the benefit or the utility of

work, this worker will decide not to work. This type of unemployment is called voluntary unemployment. Frictional unemployment (Abraham 1983) arises because of the dynamic nature of the labor market, the availability of information, the search for better jobs, and random fluctuations in demand for labor such as closing of a plant and opening of a new plant. Duration of frictional unemployment is determined by the unemployment insurance benefits and the speed of the information.

Hayek (Nishhiyama and Leube 1984: 7) contends that unemployment is due "to a discrepancy between the distribution of labor...between industries...and the distribution of demand among their producers. This discrepancy is caused by a distortion of the system of relative prices and wages." In other words, the unemployment is caused by "a deviation from the equilibrium prices and wages which would be established within a free market and stable money." This is actually a mismatch between demand and supply of labor, which is usually caused by expansionary monetary and fiscal policies and powerful trade unions. These policies, Hayek argues, create economic dislocation and structural changes in an economy which misdirect labor and other economic resources. Unions are able to set higher wages compared to market wages, which generate unemployment, particularly in industries that become less profitable. In short, for Hayek the unemployment problem is caused by resources being in the wrong places at the wrong time and can be corrected if wages and prices are determined by the equilibrium of supply and demand.

Keynes (1936) considers unemployment as an involuntary phenomenon. He

though that employment is cyclical, generated by the deficiency of effective demand, where determinants of investments become the most crucial factors. Capitalists hire workers and invest to produce output when the expectations about the economy and profits are favorable. If expectations about the future are supported by reality, investments and employment continue rising until equilibrium is reached. This equilibrium is attained by the intersection of aggregate demand and supply whose intersection point is called the effective demand, which may be less than the full employment equilibrium. If expectations about the future of the economy are not favorable, capitalists invest less and employ fewer workers. Hence, equilibrium is achieved where cyclical unemployment exists. This unemployment which is due to the deficiency of effective demand, particularly investment expenditures, can be cured by public works which may be able to stimulate private investments. Consistent with Keynes's teaching, Post Keynesians such as Davidson (1998) argue that involuntary unemployment is explained by insufficiency of effective demand, instability of exchange rates, and international mobility of finances which create uncertainty that weakens entrepreneurial confidence to make investments that will reduce unemployment. Similarly, other Keynesians argue that the unemployment is due to the contractionary nature of the U.S. monetary policy which creates deficiency in aggregate demand. By the same token, Neo Keynesians think that for the goal of price stability or for lowering the inflation rate, the aggregate demand was kept deficient (Phelps 1995). It should be stated that due to the

policy of unemployment benefits and the long period of unemployment, the unemployment problem was strongly persistent in Europe: Hysteresis (Blanchard and Lawrence 1986).

Friedman (1968) and Phelps (1968), using adaptive expectations and imperfect information, contend that an economy at a given point in time has a natural rate of unemployment which is independent of inflation in the long run. Consequently, short-term Keynesian policies are able to deviate the actual rate of unemployment from its natural rate due to expectational errors, but the policies cannot reduce the natural rate of unemployment permanently, because this rate can be reduced in the long run by increasing the real factors of production, economic growth, productivity, and the establishment of institutions eliminating mismatches in the labor market and wage rigidities. Eventually, Keynesian policies increase the inflation rate only.

Lucas (1981) thinks that the unemployment rate is determined negatively by the growth of the real wage rate and the growth rate of inflation and positively by the previous rate of unemployment. He also contends that the decline in the rate of unemployment can be generated by a mistake, or misperception, committed by employers for not understanding whether the increase in prices is relative or inflationary. He thinks that if producers interpret the rise in prices, which are generated by an increase in the aggregate demand as high demands for their products, they will hire more workers and increase production. Workers will supply more hours of work because they suffer from money illusion. But once these producers realize that the increase in prices was due to inflation, they will

cut production and employment. Hence, the rate of unemployment will return to its natural rate. For Lucas the unemployed are not interested in working at the going wage rate and consequently they continue waiting and searching for high wage employment. He (1981: 42) states:

Measured unemployment (more exactly, its non-frictional component) is then viewed as consisting of persons who regard the wage rates at which they could currently be employed as temporarily low and who therefore choose to wait or search for improved conditions rather than to invest in moving or occupational change. The view that non-frictional unemployment is, in this sense, “voluntary” does not of course imply that high-measured unemployment rates are socially costless.

Lucas (1981: 60) continues, “our model [Lucas and Rapping 1978] implies a zero rate of unemployment if workers were willing to sell apples or shine shoes.”

These explanations are misleading because the idea of the natural rate of unemployment means that those workers are not interested in working at the going wage rate, an idea that is grounded in Pigou’s theory of unemployment and it is really a calamity. People have to live. In fact, Lucas (1978: 354) argues, “involuntary unemployment is not a fact or a phenomenon which it is the task of theorists to explain. It is, on the contrary, a theoretical construct...[introduced by Keynes].” He (1978: 355) also indicates that “one cannot, even conceptually, arrive at a usable definition of full employment as a state in which no involuntary unemployment exists.” These misleading ideas have led Lucas to think that the unemployed people are not involuntary unemployed and that

they have made their decision not to work because they have preference for other activities (Blinder 1987: 131 and 1988). In addition, these explanations, with the exception of Keynes and the Post Keynesians, do not provide a short run solution to this important problem; rather, they start with the natural rate of unemployment and navigate around it and then reach the original rate of natural unemployment but with a higher rate of inflation. In addition Karanassou and Snower (1998) point out that the various types of unemployment such as the cyclical and the structural are not independent as the natural rate theory argues. These types of unemployment are generated by a combination of oil and interest rate shocks and slow employment adjustment. An economic slowdown, e.g., may create a short-run cyclical unemployment which will be reinforced by a large cost of hiring; hence, the short-run cyclical unemployment becomes a long-run unemployment problem.

Shapiro and Stiglitz (1984: 433f) think that the involuntary unemployment, “a situation where an unemployed worker is willing to work for less than the wage received by an equally skilled employed worker, yet no job offers are forthcoming”, is a persistent phenomenon, because firms provide higher wages than the going wages to workers in order not to shirk. This is because firms cannot perfectly monitor workers. If workers are caught shirking, they will be fired by the firms. The positive effect of this wage policy is to motivate workers to increase work effort and productivity. However, there is negative effect in that these firms are setting higher wages that will not be able to clear the market and solve the involuntary unemployment. Shapiro and

Stiglitz do point out that a similar idea of this wage policy was developed by Salop (1979) who argues that firms raise wages to economize turnover costs but higher wages generate involuntary unemployment. For Salop, the unemployment may become permanent because it arises by the changes in the economic structure: involuntary structural unemployment. Yellen (1984: 200) provides excellent explanations of these efficiency wages models by stating, "These approaches identify four benefits of higher wage payments: reduced shirking by employees due to a higher cost of job loss, lower turnover; an improvement in the average quality of job; applications; and improved morale.". Fundamentally, these arguments are not convincing because firms do not pay workers higher wages than the going wage rates, particularly in a globalized economy. These higher wages reduce profitability and global competitiveness of these generous firms. Lindbeck and Snower (1986 and 1988) develop the insider-outsider approach to explain wage norms, involuntary unemployment, and the role of unions. In their analysis the insiders, not firms, generate higher wages. They point out that firms do not replace their high-wage workers, the insiders or the incumbent workers, by lower wage outsiders, due to productivity loss, hostility and harassment of the insiders, and the high costs of hiring and firing. These justifications provide higher wages to the incumbent workers and prevent the employment of the outsiders. For these reasons unions also accentuate involuntary unemployment. Similarly, Solow (1985) argues that the unemployed workers, the outsiders, may choose to stay unemployed rather than working for lower money wage. The

outsiders may be punished by their co-workers, the insiders, or the seasoned workers. In fact, the seasoned workers have also the ability to convert the higher demands on their firms' products into higher wages for themselves rather than allowing their firms to employ the outsiders. Thus, the unemployment continues. Basically, this analysis is not convincing because the seasoned workers are not the powerful to determine their high wages and benefits. In addition, the explanation creates a division between the working people. However, it may be true that some incumbent crony workers receive higher wages and benefits, but this does not mean that all incumbent workers are the recipient of such benefits.

Trehan (2001) provides an important explanation of the search theory of unemployment, which was originally developed by Stigler (1962), McCall (1970), Mortensen (1970), Gronau (1971), Salop (1973), and Diamond (1981) and is grounded on the assumption that workers have different skills and jobs require specific skills. Firms search for productive workers and workers search for high-paying jobs. So, both agents continue searching until matches are reached. At that point a worker will leave the unemployment pool. But if a worker realizes later on that her productivity is worth higher wages and firms are paying high wages on the average, then the worker's reservation wage will increase. Consequently, the unemployment rate will start rising gradually, indicating a mismatch has occurred again.

Rocheteau (2006) provides a simple but rigorous analysis of the search-matching theory of unemployment. In this theory three important parts are specified. The first part is a relationship called the

wage-setting curve which indicates that when the number of vacancies rises, workers will obtain higher wages. Wages will increase when productivity and unemployment benefits rise and when labor's bargaining power is enhanced, and when unemployment benefits increase. The second relationship is called the vacancy-supply condition showing the fact that number of vacancies will be declining when wages increase. The third part shows the matching of workers and jobs to determine the unemployment rate. It follows that when the wage-setting curve intersects the vacancy supply, the equilibrium wage rate and number of vacancies are determined, a process that will determine the rate of unemployment. For example, if labor productivity increases, then profits will increase. Consequently, firms will create a higher number of vacancies and employment will increase, so will wages. In other words, the rate of unemployment will decline. In contrast, powerful unions set higher wages and extract more surplus from the capitalists; thus, firms reduce number of vacancies, and the unemployment increases. Similarly, higher taxes reduce number (or supply) of vacancies and workers' incentives to search, and shift the wage-setting curve upward (or to the left). Consequently, the unemployment will rise.

Before the occurrence of the Great Recession on December 2007, the unemployment problem had been attributed to the globalization process. Shifting production, outsourcing, downsizing by corporations have generated a high rate of unemployment in the U.S. economy. A Higher exchange rate also reduces exports and increases unemployment. Over the last two

decades transportation cost has been declining and wages and taxes have been high from a corporate perspective. These three factors have provided incentives for corporations to outsource their production tasks to other producers located in foreign countries. These forces have also pushed corporations to relocate to other countries where wages and taxes are low relative to the United States of America. It follows that many American workers have lost their jobs due to these corporate decisions. For example, due to outsourcing and relocation of firms million of workers have lost their jobs from the states of Michigan and Ohio. Large corporations have also tried to increase their efficiencies in order to make more profits in the long run by reducing cost of production. Thus, they have been involved in downsizing their operations. This process of downsizing is actually aiming at cutting employment of labor. Consequently, unemployment has been rising. Lastly, if exchange rate of the dollar is depreciated due to a low rate of interest, the export industries will be prosperous, but when the dollar is appreciated, the export industries will be stagnated, as the products become expensive in terms of foreign currencies. Other domestic industries are affected negatively by the cheaper imported products. In both industries the unemployment rate will be rising.

When the Great Recession occurred, oil prices were around \$140 a barrel due to the war in Iraq and the Federal funds rates increased seventeen times from 1 to 5.25 percent to control the growing inflation. The mortgage rate increased as well. Mortgage payments had to be adjusted upward and many of home owners were not able to pay. The housing sector collapsed and the auto

industry and other related industries such as the airline and service industries suffered huge losses. This collapse was translated into a reduction in employment and income for millions of people. In fact, Unemployment increased significantly, reaching the 9.5 percent in 2009. More than sixteen millions workers lost their jobs, and the economy has not significantly recovered yet. Most of government spending under the Bush administration was directed towards the military industrial complex, which had minimal effects of the civilian economy. That is to say, the great winners of the Great Recession were oil corporations and the military-industrial complex. Wealthy people who received benefits out of the tax reduction increased their wealth as well, and the majority of the American people lost their income. And this inequality in income distribution, along with the huge military spending for the wars and the inability of entrepreneurs to innovate and compete globally, will perpetuate the stagnation of the American economy. In other words, the rate of unemployment will stay at a high rate for many years come.

### **3. UNEMPLOYMENT AND THE ENTREPRENEUR**

Schumpeter (1934) did not provide explicitly a theory of unemployment but his theory of the business cycle does demonstrate clearly how unemployment can be reduced. Innovations (see also Vecchi 1995 and McCraw 2007) which create more jobs relative to job destruction are (??) the basic force beyond the increases in employment and the decreases in unemployment. When entrepreneurs innovate something new such as the production of a new product, a new market, a new method of production, new technologies, and a new

organization they increase investments to materialize those innovations. Investment expenditures will increase demand on economic resources and will increase their prices. Other entrepreneurs will imitate the leaders by adopting the new innovations. Labor and materials will be employed to produce the new items. Consequently, wages will be increasing and unemployment will be declining, assuming that employment creation will outweigh employment destruction due to the new innovations (see also Mortensen and Pissarides 1998 and Manuelli 2000).

Schumpeter started his analysis by explaining economic development. By development, which is the essential part of his endogenous dynamic economics, Schumpeter (1934: 83) means the “changes in economic life as are not forced upon it from without but arise by its own initiative, from within. Should it turn out that there are no such changes arising in the economic sphere itself, and that the phenomenon that we call economic development is in practice simply founded upon the fact that the data change and that the economy continuously adapts itself to them, then we should say that there is no economic development.” Economic development which reflects new changes outlined below is not a phenomenon that can be explained by economic forces only, but it has to be explained by other forces that are external to the ones analyzed by economic theory.

For Schumpeter, economic development generates changes in the socio-economic environment, including the existing equilibrium. As he (1934: 64) puts it: “Development ...is spontaneous and discontinuous change in the channels of the flow, disturbance of equilibrium, which forever alters and displaces the

equilibrium state previously existing.” The essential driving force for generating development is innovations introduced by the entrepreneurs whose leadership becomes the triggering device for the discontinuous dynamic changes. Innovations start by “the producer [not consumer] who as a rule initiates economic change, and consumers are educated by him if necessary” (Schumpeter 1934: 65). It follows that economic development is defined “by the carrying out of new combinations” which are triggered by the business entrepreneur and appeared discontinuously (Schumpeter 1934: 66). And the outcomes of these combinations are welcomed by the consumers who are affected by the entrepreneurial leadership. That is, leadership becomes the prime mover to consumers and other imitating producers.

The concept of innovation which creates changes according to Schumpeter (1934: 66) covers the following five areas of development: “(1) the introduction of new good...or of a new quality of a good. (2) The introduction of a new method of production...(3) The opening of a new market...(4) The conquest of a new source of supply of raw materials, or manufactured goods...(5) The carrying out of the new organization of any industry, like the creation of a monopoly position...or the breaking up of a monopoly position.” The new combinations are usually embodied in new productive enterprises which start by utilizing the unemployed working people, the unsold raw materials, the new technologies, and the unused productive capacity. As Schumpeter (1934: 68) points out, “Development consists primarily in employing existing resources in a different way, in doing

new things with them, irrespective of whether those resources increase or not.” For the continuation of the process of economic development and innovations credit and finance are important requirements: “in carrying out new combinations, financing...is fundamentally necessary” (Schumpeter 1934: 70). Credit is a very important function in economic development because it provides funds for the entrepreneurs to materialize innovations, or to carry out the new combination. Consequently, Schumpeter (1934: 74) argues, the banker who has savings and creates the money (or the purchasing power) for the entrepreneur is “a phenomenon of development.”

Accordingly, entrepreneurial leadership which triggers the process of economic development is “a special kind of function and in contrast to a mere difference in rank, which would exist in every social body” (Schumpeter 1934: 87). Leadership arises “only where new possibilities present,” and innovations require leadership, and the entrepreneur is the leader who responds to reality effectively and creatively. For her efforts, the entrepreneur earns entrepreneurial profits as a surplus over costs. That is, new combinations are carried out if there is development and if total receipts are greater than the total costs. Most importantly, Schumpeter (1934: 154) contends, “without development there is no profit, without profit [there is] no development.” And without profit there is no accumulation of wealth under capitalism. In other words, entrepreneurial leadership becomes the essential driving force for the business enterprises and the backbone of competitive capitalism.

Not only does economic development generate employment, income, and profits, but it also creates the value of land (rent), and without development the value of land does not exist. As the process of development continues the land value will rise due to urban and rural expansion. Moreover, development creates demand for certain goods. This is called repercussion of development, which creates surpluses (Schumpeter 1934: 172). Hence, profits are augmented in the process of the repercussion of development, which will in turn create another price for credit which is called the interest. Interests will be paid out of the profit or the surplus value. It is also true that without development there is no interest, but the process of development makes interest act "as a tax upon profit" (Schumpeter 1934: 175). For Schumpeter, supply and demand for credit will determine the interest rate, where the demand for credits is discontinuous because innovations are discontinuous. In short, higher wages and employment, economic profit, interests, and rents are all phenomena generated by innovations which in turn furnished by the entrepreneur.

During the process of economic development the economy is drifted toward a boom which is followed by a downturn, or a recession. Schumpeter (1927, 1934, and 1964) contends that during the early period of the prosperity phase of the business cycle, the new innovating firms generate a higher demand for economic resources which must come from other industries. However, an innovative firm means it is able to produce per unit of a product at a smaller cost (Schumpeter 1928: 378). At the same time the innovative firms start selling the new products at reasonable

prices, reflecting the economic power of these innovative enterprises. Given the low cost of production, the reasonable prices will generate higher revenues and surpluses which include profit.

The profit, however, is a temporary phenomenon. This is because some older firms become adapted to the new conditions and innovations and will be able to imitate (or copy) the methods and the products of the leading innovative enterprises. On the one hand, demand for economic resources will rise, so will their prices and the cost of production. Cost per unit of output will increase. On the other hand, the large volume of production will lower the prices, as firms lose their economic power for setting higher prices for their products. Consequently, as costs rise and revenues decline, profits will be eliminated, and liquidation will follow. Pessimism emerges and the capitalist economy moves toward a recession or a depression. Revival will start again after new swarms of innovations are initiated by some entrepreneurs. Business enterprises whose leaders are creative will establish their economic power again for setting higher prices for low cost production. Profits will be rising, so will investments and employment.

Essentially, Schumpeter's theories of economic development and the business cycle are based on the entrepreneur and her creative leadership and responses. Schumpeter emphasizes the fact that innovation means creative destruction, destroying old products, firms, and markets and creating new products, firms, markets, and technologies that generate secondary waves. Innovation is a matter of entrepreneurial leadership and individual initiatives (Schumpeter 1928: 384). The entrepreneurial creative responses, Schumpeter (1947b: 150)

argues, are not predictable but are generating significant changes for a long period of time. Hence, entrepreneurship according to Schumpeter (1947b: 151) is the mechanism of economic change, and the entrepreneur is the one who gets things done and controls the resistance and difficulties facing her business operations. In fact, the entrepreneur is the force behind economic and institutional changes such as technologies, products, contracts, property, labor relations, regulations, security, and freedom (Schumpeter 1947: 2-3).

#### **4. SOME ADDITIONAL COMMENTS**

The leadership of the entrepreneur and the provision of innovations under competitive capitalism will provide the necessary condition for a nation to rise globally and to become a great power (Moe 2007). Innovations are manifested in new technologies, organizations, new markets, and products, a whole cohesive process that generates higher income, employment, prosperity, and welfare, creating social cohesion among people to defend their country. Simultaneously, these new technologies can be used to develop the military arsenal and the necessary hardware that will enable the country to expand geographically and to submit weak countries: colonialism and imperialism. This expansionary process will provide new markets and economic resources for further expansion and domination. However, this process which is generated by the leadership of the entrepreneur can be met with external opposition and internal economic limitation, creating forces that will weaken the rising power. Most important, these forces blocking the domestic progress can be controlled and

avoided if the country chooses to lead by examples of development and prosperity. If this course of action is adopted, it will be the optimal path for world prosperity.

Logically, for Schumpeter, greatness and capitalism will collapse if the entrepreneurial function is weakened or dies. Entrepreneurs develop new technologies and when technological progress becomes the business of trained specialists, then one of the innovative function is disappeared; and consequently, the entrepreneur tends to die out. Similarly, Schumpeter (1950: 133) points out, if “economic progress tends to become depersonalized and automated, [then] bureau and committee work tends to replace individual action.” Under this condition the entrepreneurial leadership and personal success do not exist, and the life of capitalism tends to an end, as the life of feudalism eventually ended. Schumpeter (1950: 134) clearly states, “Economically and sociologically, directly and indirectly, the bourgeoisie therefore depends on the entrepreneur and, as a class, lives and will die with him, though a more or less prolonged transitional stage...is quite likely to occur, as in fact it did occur in the case of the feudal civilization” By the same token, giant corporations eliminate small and medium-sized firms and create bureaucratized processes that will swallow not only the capitalist income but the capitalist innovative and competitive function. Schumpeter (1950: 134) explains:

The perfectly bureaucratized giant industrial unit not only ousts the small or medium-sized firm and “expropriate” its owners, but in the end it also ousts the entrepreneur and expropriates the bourgeoisie as a class which in the process stands to lose not only its

income but also what is infinitely more important, its function. For empirical testing of these theoretical economic propositions, Wolfson (1958: 49) criticizes Schumpeter's economic theory, which is based on the entrepreneurial leadership, by arguing that his theory is not testable. This criticism can easily be countered. Schumpeter (1927) points out that a theory can be vindicated by statistics and history. If one uses history as the method of testing Schumpeter's theory, it can be demonstrated that his theory is indeed testable. For example, Moe (2007) provides evidence from United Kingdom, France, Japan, and the United States of America showing that technological progress and the availability of human capital contributed significantly for the economic development of these countries during 1800-1900. Imitation of technologies introduced by other countries and the existence of relevant cultural institutions had provided crucial support for entrepreneurs to carry out the development process.

The American business cycles of 1992-2001 and 2007-2009 had shown clearly that the basic driving force for the expansion was innovations manifested by the introduction of information technology. The information technology was materialized by private domestic investments in the technology sector, which in turn increased investments in other related industries. This process of increased investments led to higher levels of income and employment in the economy. In fact, the unemployment rate was less than 4 percent during the last part of 2000. Higher employment and income accompanied by debt generated a higher growth rate of consumption spending which amounted to more than

4 percent annually. Globally, the diffusion of information technologies allowed other countries to participate in the process of maintaining the cumulative process of economic development and prosperity, as several countries such as India and China entered the global process of development as strong participants. Thus, foreign markets were opened to American and non-American products. It is fair to criticize Schumpeter on considering some activities as innovative and genius (see also Laumas 1962). For example, Schumpeter (1950: 132) states: We have seen that the functions of entrepreneurs is to reform or revolutionize the pattern of production by exploiting an invention or, more generally, an untried technological possibility for producing a new commodity or producing an old one in a new way, by opening up a new source of supply of materials or a new outlet for products, by reorganizing an industry and so on. Railroad construction in its earlier stages, electrical power production before the First World War, steam and steel, the motorcar, colonial ventures afford spectacular instances of a larger genus which comprises innumerable humbler ones.

The unfortunate point is Schumpeter's consideration of colonial adventures, which are the worst chapter in human civilization, as ingenious activity. Entrepreneurs of recent time must abandon this colonial and imperialist approach because it is costly in lives and funds. For example, the colonial adventure of the Bush administration in Iraq generated millions of deaths, wasted trillions of dollars that could have been used for helping the American people, tarnished the reputation of the American people, and created the Great Recession

of December 2007. In other words, it has not minimized cost of production and consequently cannot be considered innovations by even Schumpeter's own account. What modern entrepreneurs must practice is to explore innovative ways for obtaining profitable contracts for their business enterprises. Having innovative skills and global marketing knowledge will allow business entrepreneurs competing globally and penetrating peacefully everywhere, making lucrative profits for their enterprises without causing people any harm. In fact, the innovative peaceful business practices of the Indian and the Chinese enterprises must be studied in colleges and universities, because they are profitable for all partners. And these entrepreneurial cases represent the opposite end of the American business practices, which are designed to protect these nations from their enemies rather than obtaining concessions to oil corporations to inhibit the development process of other countries.

## 5. SUMMARY AND CONCLUSIONS

This paper provides a review of the dominant theories of unemployment and explains the most important theory of employment developed by Schumpeter. Fundamentally, countries need entrepreneurs and innovations that are able to provide new products and services for the global economy. The creation of new things by innovations will create the necessary markets to sell products. Creation of demand will increase investment, employment, and income.

If a country whether large or small cannot innovate and cannot provide new things for the global economy, then that country will suffer from unemployment and stagnation. At that point, fiscal and

monetary policies become unimportant policies for solving the unemployment problem.

In order to provide new products and other things for the global economy, a country must have a large number of entrepreneurs who can innovate new products and are able to find new markets. This suggests that a country such as the United States of America cannot solve its basic problems of unemployment by pumping more money by the Federal Reserve or running a large deficit spending by the government. The country needs entrepreneurs to innovate new products and to find new markets to compete peacefully. In other words, wars cannot create employment and prosperity. Once these conditions are met, investments, income, and employment will rise.

## REFERENCES

- Abraham, K., "Structural/Frictional VS. Deficient Demand Unemployment," The American Economic Review, 73, 4, (September 1983), PP.708-724.
- Blanchard, O. and Lawrence, S. 1986. Hysteresis and the European Unemployment Problem," In Stanley Fischer, NBER Macroeconomics Annual. Cambridge, MA.: MIT Press, pp.15-78.
- Blinder, A. 1987. "Keynes, Lucas, and Scientific Progress," The American Economic Review, 77, 2, (May), pp.130-136.
- Blinder, A., "The Challenge of High Unemployment," The American Economic Review, 78, 2, (May 1988), PP.1-15.
- Davidson, P.1998. "Post Keynesian Employment Analysis and the Macroeconomics of OECD Unemployment, The Economic Journal, 108, 448, pp.817-831.

- Diamond, P. 1981. "Mobility Costs, Frictional Unemployment, and Efficiency", *The Journal of Political Economy*, 89, 4, (August), pp.798-812.
- Gronau, R. (1971), "Information and Frictional Unemployment," *The American Economic Review*, 61, 3, (Part I), pp.290-301.
- Friedman, M. 1968. "The Role of Monetary Policy," *The American Economic Review*, 58, 1, pp.1-17.
- Karanassou, K. and Snower, D., 1998. "How Labor Market Flexibility Affects Unemployment: Long-Term Implications of the Chain Reaction Theory," *The Economic Journal*, 108, 448, (May), pp.832-849.
- Keynes, J. 1936. *The General Theory of Employment, Interest and Money*. Harcourt, Brace.
- Laumas, P.S. (1962). "Schumpeter's Theory of Economic Development and Underdeveloped Countries," *The Quarterly Journal of Economics*, 76, 4, (November), pp.653-659
- Lindbeck, A. and Snower, D. (1986). "Wage Setting, Unemployment, and Insider-Outsider Relations," *The American Economic Review*, 76, 2, (May), pp.235-239.
- Lindbeck, A. and Snower, D. (1988). "Long-Term Unemployment and Macroeconomic Policy," *The American Economic Review*, 78, 2, (May), pp.38-43.
- Lucas, Jr., R., "Unemployment Policy," *The American Economic Review*, 68, 2, (May 1978), PP.353-357.
- Lucas, Jr., R., and Rapping, L., "Real Wages, Employment and Inflation," *The Journal of Political Economy*, 77, 5, (1969), PP.721-54.
- Lucas, Jr. 1981, *Studies in Business-Cycle Theory*, MIT Press, Cambridge, MA:
- Manuelli, R. 2000. "Technological Change, the Labor Market, and the Stock Market," NBER Working Paper 8022 (November).
- McCall, J. (1970), "Economies of Information and Job Search," *The Quarterly Journal of Economics*, 84, 1, 113-126.
- McCraw, T. 2007. Prophet of Innovation: Joseph Schumpeter and Creative Destruction, Belknap Press.
- Moe, E. 2007. "The Economic Rise and Fall of the Great Power: Technological and Industrial Leadership since the Industrial Revolution," *World Political Science Review*, 3, 2, pp.1-39.
- Mortensen, D. (1970), "Job Search, the Duration of the Unemployment, and the Phillips Curve," *The American Economic Review*, 60, 5, pp.847-862.
- Mortensen, D. and Pissarides, C. 1998. "Technological Change, Job Creation, and Job Destruction," *Review of Economic Dynamics*. Pp. 733-753,
- Nishiyama, C. and Leube, K. 1984. *The Essence of Hayek*, Hoover Institution, Stanford University, Stanford, CA.
- Phelps, E. (1968). "Money Wage Dynamics and Labor Market Equilibrium", *The Journal of Political Economy*, 76, 2, pp.678-711.
- Phelps, E. 1995. "The Structuralist Theory of Employment," *The American Economic Review*, 85, 2, (May), pp.226-231.
- Pigou, A.C., (1933), *The Theory of Unemployment*, London: Macmillan.
- Rocheteau, G. 2006. "Understanding Unemployment," *Economic Commentary*, Federal Reserve Bank of Cleveland, (October 15), pp.1-4.
- Salop, S., (1979), "A Model of the Natural Rate of Unemployment," *The American Economic Review*, 69, 1, (March), pp. 117-125.
- Salop, S., (1973), "Systematic Job Search and Unemployment," *The Review of Economic Studies*, 40, 2 (April), pp. 191-201.
- Schumpeter, J. 1927. "The Explanation of the Business Cycle," *Economica*, 21, (December), pp.286-311.
- Schumpeter, J. 1928. "The Instability of Capitalism," *Economic Journal*, 38, 151, (September), pp.361-386.

- Schumpeter, J. 1934. Theory of Economic Development, Harvard University Press, Cambridge, MA..
- Schumpeter, J. 1947. "Theoretical Problems of Economic Growth", *Journal of Economic History*, 7, (Summer), 1-9.
- Schumpeter, J. 1947b. "The Creative Response In Economic History," *Journal of Economic History*, 7, 2, (November), pp.149-159.
- Schumpeter, J. 1964. Business Cycles: A Theoretical, Historical and Statistical Analysis of the Capitalist Process. Porcupine Press, Philadelphia, PA.
- Schumpeter, J. 1950. Capitalism, Socialism, and Democracy, Third Edition, New York: Harper.
- Shapiro, C. and Stiglitz, J. (1984). "Equilibrium Unemployment as a Worker Discipline Device," *The American Economic Review*, 74, 3, (June), pp. 433-444.
- Solow, R.M. 1980. "On Theories of Unemployment," *The American Economic Review*, 70, 1, (March) pp.1-11.
- Solow, R. M., "Insiders and Outsiders in Wage Determination," *Scandinavian Journal of Economics*, 87, 2, (1985), pp. 411-428.
- Stigler, G. (1962), "Information in the Labor Market," *The Journal of Political Economy*, Part 2, 70, 5, pp.941-105.
- Sweezy, P. (1934), "Professor Pigou's Theory of Unemployment," *The Journal of Political Economy*, 42, 6, (December), pp.800-811.
- Trehan, B. 2001. Unemployment and Productivity, *Economic Letter*, Federal Reserve Bank of San Francisco, Number 28, October 12, pp.1-3.
- Vecchi, N. 1995. Entrepreneurs, Institutions and Economic Change: The economics thought of J.A. Schumpeter (1905-1925), London: Edward Elgar.
- Wolfson, R. 1958. "The Economic Dynamics of Joseph Schumpeter," *Economic Development and Cultural Change*, 7, 1, (October), pp. 31-54.
- Yellen, J. (1984), "Efficiency Wage Models of Unemployment," *The American Economic Review*, 74, 2, (May), pp.200-206.