

3-1-2012

# A Critique of the Neoclassical and a Revision of the Keynesian Theories of Employment

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# **A Critique of the Neoclassical and a Revision of the Keynesian Theories of Employment**

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**A Thesis**

**Presented to**

**The Faculty of Social Sciences**

**University of Denver**

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**In Partial Fulfillment**

**Of the Requirements for the Degree**

**Master of Arts**

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**By**

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**March 2012**

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Title: A Critique of the Neoclassical and a Revision of the Keynesian Theories of Employment

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Degree Date: March 2012

## **ABSTRACT**

The neoclassical theory of employment fails to apply to modern capitalism since it claims that unemployment is necessary all voluntary. Its problems are pointed out by Keynes. But, if we look at Keynes's system, we find that an essential explanation about why modern capitalism suffers from weak demand is not provided. To answer this question an alternative consumption theory is needed. Levine's consumption theory well explains the condition of under-consumption. Furthermore, a deep problem of capitalism reveals itself: the production format and the distribution pattern of capitalism result in a huge income discrepancy between the working-class and the capitalist-class and its consequence, according to Levine's consumption theory, is an overall weak demand. The demand problem might be an inherent weakness of capitalism which cannot be cured within its structure. However, we still see the bright side of capitalism that is its influential stimulation mechanism, which provides more transformational growth – the driving force behind the progress of human civilization - than any other social structure. Unexpectedly, we become trapped in a dilemma.

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## **Introduction**

Since the outbreak of the sub-prime crisis in late 2006, the unemployment rate has been soaring high in the United States. It looks like every economic crisis in capitalism has been accompanied by a slump of the employment rate, which Keynes attributes to the failure of effective demand. Bailout plans were thus carried out by the government, but five years have passed and the unemployment rate is still high by historical standards. It is obviously not the first time that Keynesians policy has failed to be applied to major economic crises. However, within the discipline of economics, very few helpful contents of unemployment theory can be found: the main stream of economics before Keynes views unemployment as a voluntary phenomenon, but the majority of unemployment we experience in modern capitalism is better characterized as involuntary. The neoclassical theory of voluntary employment is incorrect, but the fact that Keynesian policies, even when they are applied, cannot permanently cure for under-consumption warrants further reflection: weak demand and involuntary unemployment can be characterized as an inherent weakness of capitalism, whose ills can hardly be cured within such a structure.

## Chapter One

### The Neoclassical Theory of Employment and its Problems

Neoclassical macroeconomic theories were basically constructed on neoclassical economists' faith in the power of the market, which was first introduced by Adam Smith in his *Wealth of Nations*. They extend Smith's notion of the "invisible hand" that they thought would guide and push every element in the market toward their optimum conditions. That is to say, the market will automatically adjust the economy to operate at its most efficient format and simultaneously provide the most satisfaction to its participants.

In fact, the theory of employment drew very little emphasis in neoclassical theories. Professor Pigou's ideas in his *Theory of Unemployment* might be the only systematic theory of employment that can be found in the entire neoclassical system before Keynes.<sup>[1]</sup> Its subordinate position might surprise many economists nowadays because the problem of unemployment has been a pivotal and onerous economic problem from which every economy has been suffering. However, by understanding the way that neoclassical economists conceive unemployment, people will find out that unemployment, at any rate, is not a social problem. Although the theory of employment in the neoclassical system had been refuted by Keynes in his *The General Theory*, it still provides a way to reflect upon the problems of unemployment.

## **The neoclassical theory of employment**

Neoclassical theory of employment is fundamentally built on two “objective assumptions”: 1. The marginal productivity of labor is diminishing as the number of laborers working on fixed capitals (or land) increases; 2. Supply will automatically create its own demand. There is also one “subjective assumption”: the utility of real wage is the sole variable in determining labor supply.

The first objective assumption was obtained from the classical observation concerning the law of outputs from lands. They noticed that the marginal product of labor on a given parcel of land will slope downward as the number of laborers increases. Neoclassical economists did not provide convincing evidence that the same law would occur in industries other than agriculture. In fact, an increasing or constant marginal productivity of labor was found in many manufacturing industries, especially in the long run. However, since agriculture accounted for the majority of the national product when the classical school dominated the economics study, thinking of macroeconomic facts with a universal “diminishing marginal productivity of labor” was a good way to simplify complex problems and make economics more accessible for them. The theory of a downward sloping labor demand curve was thus concluded by neoclassical (and classical) economists. Here its principle is clear, with diminishing marginal productivity of labor, rational producers would only pay the amount equal to the marginal product of workers in order to achieve profit

maximization, so the amount of wages that producers are willing to pay decreases with an increasing amount of labor working on a fixed amount capital.

On the other hand, labor was conceived by Jevons as the “painful exertion of mind or body undergone partly or wholly with a view to future income”,<sup>[2]</sup> so the happiness from consumption achieved by real wages has to be laborers’ primary motivation for working. Laborers will not produce if the marginal utility of the real wage falls short of the net pain of working; thus a higher labor price, which implies more utility from consumption, will motivate more people to work. As a result, an upward sloping labor supply curve is depicted by neoclassical thinkers, which shows that the utility of the real wage is the sole variable in determining labor supply. With a downward sloping labor demand curve and an upward sloping labor supply curve, the employment level is thus determined by their intersection. In this neoclassical model, the decision of working or not at the current wage level is completely made by laborers themselves. If people refuse to work they do it voluntarily, because they could always find a job for less wages.

The second objective assumption is called Say’s law. Jean-Baptiste Say in his *Treatise of Political Economy* said that the only reason that people walk into a worksite is that they want the income, which can then be used for consumption. Thus the act of production will simultaneously create income and purchasing power that contain the same values. J. S. Mill in his *Principles of Political Economy* expressed the same idea that

“What constitutes the means of payment for commodities is simply commodities, each person’s means of paying for the productions of other people consist of those which he himself possesses. All sellers are inevitably, and by the meaning of the word, buyers.”[3] [4]

Classical thinkers further concluded that the newly created purchasing power of production is entirely applied in two parts: consumption by households and investments by firms. Since the latter is induced by an increment of consumption in the future (profit), it can still be considered as delayed consumption. Immediate consumption and delayed consumption will compete for limited income via interest rates, as a reward for delaying consumption, whereby constituting equilibrium. In other words, investment and consumption, via interest rates, will absorb all income. If people reduce their consumption, the supply of loanable funds increases. As a result, interest rates will go down and more investment will be induced, and vice versa. According to this argument, money is neutral and only works as an exchange medium. The reason is that Say’s law is explained from the perspective of a mean of payment in real terms, thus no value would be stored in money terms in his system. Consequently, there will be no impediment to the circulation of real goods. Furthermore, according to the employment determination in the classical system there is no impediment to full employment either. Say’s law is so important in the classical system because it offers no possibility of the general glut. If whatever is produced can always be absorbed by demand, outputs will only change with changes in marginal productivity of labor, and the laborers’ willingness to work. It thus justifies the critical neoclassical conception that unemployment is essentially a voluntary phenomenon.

Now, the reason why unemployment is not a social problem within the neoclassical system becomes clear. Unemployment in neoclassical theory is voluntary. People choose not to work at their will and in fact get better off as a result. However, involuntary unemployment is indeed a real phenomenon. The answer to this fact from neoclassical economists was direct and simple. Because the existence of labor unions raises the negotiation power of labor, if workers work together to irrationally fight any reductions on the real wage, even though it is much higher than their marginal productivity, the market is forced to deviate from equilibrium; some people are involuntarily unemployed because other employed people are too “greedy”. If neoclassical thinking is accurate, involuntary unemployment will be easily solved if we dismiss labor unions and let market forces work their magic.

### **Keynes’s criticisms of the neoclassical theory of employment**

Neoclassical theory of employment in fact looks quite solid from the perspective of the model’s construction, seeing that its logic is rather sound on the surface. However, the world that neoclassical economists depict is not the one people live in. Keynes in his *The General Theory* pointed out many mistakes associated with the neoclassical theory of employment. His criticisms attack two parts: the neoclassical labor supply theory and Say’s law.

### ***1. Problems with neoclassical labor supply theory***

In the neoclassical theory of employment, the utility of the real wage is the sole variable in determining labor supply. The logic behind this is simple: since consumption, as the reward for unpleasant working, is the primary reason that induces people to work, a higher real wage will always be accompanied with more laborers, since higher utility from a higher real wage can compensate for more pains from working. However, Keynes found that “a situation where labour stipulates for a money-wage rather than a real wage, so far from being a mere possibility, is the normal case.” [5] While a reduction of the money wage might confront resistance or withdrawal of labor due to discontents among workers, a cut in the real wage through an increase in the price level hardly renders the same result. Besides, Keynes points out that neoclassical theory suggests that the wage bargaining between entrepreneurs and workers determine the real wage but wage bargaining, almost always, are made in nominal terms as opposed to real terms.

To understand Keynes’ criticism, we need to clarify that the strong reactions of laborers to falling money wages are not due to what is called “money illusion theory”, which suggests that the illusion of a constant purchasing power of money makes laborers believe that they can best protect their real wage by resisting a money wage cut. “Money illusion theory” certainly helps validate neoclassical ideas because it implies that laborers at heart only care about real wages. In this case, when laborers

resist money wages, they mean to protect their real wage. But, laborers still behave contrary to neoclassical doctrine even though they are quite aware of the change of the price level, saying an increasing price level might reduce their real wage. Hence, money illusion theory cannot save neoclassical labor supply theory. Without its support, the practical responses of laborers to changes in both real and money wages questions the validity of neoclassical labor supply theory. Moreover, if the supply of labor is not solely a function of the utility of real wages, the entire edifice of neoclassical employment theory would not hold well.

Neoclassical economists taught us that the existence of involuntary unemployment is a result of laborers being paid more than their marginal productivity. This suggests that we can solve the unemployment problem by cutting wages; whether real or nominal wages, we are left uninformed. According to their labor demand theory, it has to be the real wage because involuntary unemployment is caused by the fact that laborers are paid in excess of their marginal productivity. However, it is a rather difficult to maneuver to execute for the reasons explained below. Therefore, I believe that neoclassical economists apply a dichotomy to deal with the problem: they imply cutting the money wage when advising government and mean cutting the real wage when preaching their doctrines. They reconcile this dichotomy by tacitly assuming that the difference between the money wage and the real wage would involve no significant change in their conclusions. But in fact, it does matter quite significantly.

Keynes was considerably dubious of the neoclassical persuasion whereby they taught us to believe that

“Prices are governed by marginal prime cost in terms of money and that money-wage largely governs marginal prime cost. Thus if money-wages changed, one could have expected the classical school to argue that prices would change in almost the same proportion, leaving the real wage and the level of unemployment practically the same as before, any small gain or loss to labour being at the expense or profit of other elements of marginal cost which have been left unaltered.”[6]

This statement shows that neoclassical economists’ opinions on dealing with involuntary unemployment are inconsistent with their value theory. Moreover, if we ignore the neoclassical value theory and use only Keynes’s idea, we still get the same conclusion: assuming that a reduction of the money wage will have no effect on price, a money wage cut will bring more employment only if there is an increase in demand. However, it oftentimes will only bring a negative effect on aggregate demand because the direct result of falling money wages is a redistribution of income from laborers to entrepreneurs. Since Keynes claims that the marginal propensity to consume of entrepreneurs is lower than that of workers, a falling money wage, with a constant price level, will deteriorate the demand and thus reduce employment.

The reason why labor resists to a falling money wage is answered by Keynes in this way: since there is imperfect mobility of labor, it is almost impossible to adjust the money wage in all industries simultaneously. If workers in some industries accept a wage cut while others refuse to do so, they will suffer an exclusive relative reduction in real wages, the effect of which is a redistribution of the aggregate real wage between different labor-groups instead of improving employment. Thus Keynes

thought workers, though unconsciously, “are instinctively more reasonable economists than the classical school, inasmuch as they resist reductions of money-wages whereas they do not resist reductions of real wages.”[7]

In addition, Keynes also to some extent denies the neoclassical wage theory as well. In neoclassical thinking, the real wage is determined by both the marginal productivity of labor and the marginal disutility of employment. It might be legitimate to say that laborers would not work if the real wage was not enough to cover the disutility of working. However, working at a wage level just equal to the marginal disutility of employment is not what laborers actually do. If people with no endowment (the working class) refuse to work, they get no means of payment and isolate themselves from the entire social exchange. From this standpoint, the pain from working, comparing to the importance of the money wage as means of payment in social exchanges, is negligible. Therefore, in modern capitalism, laborers are always working for a real wage above the amount that is only enough to cover the disutility of work. Keynes, though he didn't express the same idea when criticizing the neoclassical theory of wage determination, maintains a similar conclusion by saying that a reduction in the real wage through an increase in prices will not be resisted by workers, “unless the reduction proceeds so far as to threaten a reduction of the real wage below the marginal disutility of the existing volume of employment.”[8] It certainly implies laborers work for a wage above the amount necessary to cover their disutility of working and a “not so far” reduction of the real wage is allowed.

Apparently, according to Keynes, laborers' resistance to a falling money wage and their tolerance for a falling real wage indicate problems for the neoclassical labor supply theory. The utility of the real wage is not the sole variable that determines labor supply. If the reduction of the real wage via a modest increase in price occurs, the real wage might not even be the important variable. If Keynes's explanation from the perspective of the immobility of laborers is correct, the psychological justice in distribution might turn out to be another important factor that shapes our labor supply curve. But unfortunately, it is not further discussed by Keynes.

Also, Keynes thinks that the real wage will fall as employment increases because the increase in employment is associated with a decrease in labor productivity. Actually, though, labor productivity normally rises as employment increases, so real wage cuts do not have to occur with increases in employment. This makes Keynes's argument that unemployment is due to insufficient aggregate demand rather than to high wages even stronger, as Keynes himself recognized in his paper, "Relative Movements of Real Wages and Output,"<sup>[9]</sup> in response to papers by John Dunlop and Lorie Tarshis in the same issues of that journal.

## ***2. The breakdown of Say's law***

Over a century before Keynes' published his *The General Theory*, Thomas Malthus and J. C. Sismondi tried to provide a theoretical rebuttal of Say's Law. Sismondi questioned the self-equilibrating nature of a capitalistic system as suggested by Say's

Law. He emphasized that while the productive powers of the modern capitalistic system increase, the

“Working class, having only the purchasing power of subsistence wages, is unable to purchase all the products the system is capable of producing. Inadequacy of consumer purchasing power will manifest itself in overproduction which is the most striking feature of economic crises” [10].

Malthus expressed a similar idea by arguing that

“When profits rise, there will be a tendency for capitalists to spend a smaller proportion of their gains and to save more. They are more interested in accumulation than in making large expenditures on consumer goods. Their savings increase the stock of capital and eventually output, which increases the problem of maintaining effective demand.”[11]

However, these arguments, though they unveil the mistake that Say might make and also inspired Keynes’s macroeconomics afterward, did not attract enough attention.

The difficulties of figuring out Say’s problems at that age came from the fact that the concept of money and the monetary market were underdeveloped. For classical economists, social exchange does not fundamentally deviate from a barter economy.

As a result, money was only considered as medium of exchange. In addition, they view interest (a reward for waiting) as the vehicle for equilibrating saving and investment into equilibrium.

“If goods are intended to be exchanged for other goods; every act of production simultaneously creates a market for the product produced by market for the monetary means of purchasing it. An excess supply of all goods relative to the aggregate demand for them is thus a logical impossibility.”[12]

Keynes’s rebuttals to Say’s law start with a different formulation of interest, which plays a key role in maintaining Say’s Law. In the classical view, investment is in fact another form of consumption---consumption in the future. Since future consumption requires people to abstain from immediate pleasure, interest, as the reward for

unpleasant waiting, will automatically adjust the amount of savings to equal to the amount of investments. This allows current products, regardless what usage they were put into, to be completely absorbed by demand for either immediate consumption or investment.

The problem with this theory of determination of interest, as Keynes points out, is that it completely ignores the real determinant “income” and treats investment and saving, which are in fact determinates, as determinants. A shift of investment demand will definitely change income, which further shifts the saving supply curve. So, without knowing how much saving will be changed by an income shift, there is no way that the interest rate can be determined in this model. Keynes’s criticisms of neoclassical ideas on interest are not primarily concerned with the construction of the model. Rather, it is a more fundamental concern about interest as a reward for waiting. In Keynes’ opinion, interest in fact is a reward for parting with liquidity, thus it is to a large extent determined by the public desire for liquidity compared to the quantity of money in circulation. This standpoint rebuts the neoclassical opinion that money is neutral because the supply of money under Keynes’s doctrine has substantial power in affecting the interest rate, which is beyond question an important determinant of the quantity of investment.

### **Alfred Marshall's "scissors"**

The major step Marshall made on the classical system is the incorporation of marginal utility theory in the determination of value. In the classical model, exchange value is solely determined by the cost of production, (or, some say, by the requirements for reproduction) which consists of wages (determined by the value of laborer's means of subsistence), normal rate of profits (how it is determined is not clearly demonstrated by classical economists), and rents (a result of a uniform price with differences in fertility of land in the market instead of a determinant of value). Marshall reasons that assuming a constant marginal utility of money, the larger the quantity of a commodity a person has, the smaller will be the price that person will pay for a little more due to the fact that "total utility of a thing to anyone increases with every increase in the stock of it, but not as fast as his stock increases."<sup>[13]</sup> According to this fact, a downward sloping demand curve is obtained and would be able to cut the classical upward supply curve, which is based on the law of diminishing marginal returns, at a price level that just clears the market. This neoclassical version of value theory in fact made a substantial improvement on Say's Law, which completely ignores the importance of the demand side in determining value. Marshall treats consumers' wants and their satisfaction as an equally important element as cost of production in value theory thus concludes that "price is governed neither by cost of production alone nor by marginal utility alone, but by the interaction of these forces as they express themselves in the demand for, and the

supply of, a good”.[14] This is Marshall’s famous “scissors” reference, which foreshadowed the neoclassical conception of the market mechanism.

This neoclassical value theory, at the time it was created, was a micro model rather than a macro model. The definition of marginal utility given by Marshall, which set the neoclassical demand curve, in fact focuses only on the consumption of a single commodity instead of commodities as a whole. Moreover, the price determined by this model is the money price, which does not have a clear macro meaning. However, the central idea of the neoclassical system that *the economy is a mechanism for allocating scarce resources efficiently among competing ends* allows this model to have a macro explanation. Assuming that every single market is in neoclassical equilibrium, if we add all these individual markets up together, we can obtain the aggregate supply curve, which shows that at any price level, competition in the factor market will lead the resource to be allocated in the most efficient manner. Nonetheless, since the total prime cost (labor, reproducible factors) with fixed production factors (lands, irreproducible factors) is upward sloping while the amount of aggregate production increase, we still have an upward sloping aggregate supply curve. On the other hand, we also get an aggregate demand curve, which shows that at any price level, the aggregate income will be spent on commodities that generate the most aggregate utility for consumers. Because consumption of every commodity follows the universal law of diminishing marginal utility, it follows that aggregate demand will also follow this principle. As a result, we still obtain a downward sloping demand

curve. Consequently, the point where the aggregate supply curve cuts the aggregate demand curve will determine the general price level. This general price is neither the money price nor the relative price because there is nothing that the general price can compare with. The general price is in fact the real value of society's output which is associated with social welfare. In other words, the general price determined by this model is the maximized real value of social output that an economy can provide for a given population facing resource constraints.

Although Marshall improves Say's law by incorporating the marginal utility theory in the determination of value, he still adheres to the fundamental idea of Say's Law – whatever is produced will be absorbed by demand through the adjustment of market prices, so the free market can still automatically lead our economy to full employment and maximum capacity. Once again, in Marshall's model, no general glut exists and no unemployment is involuntary. If markets can function perfectly without any interference, optimal resource allocation will be achieved. The incorporation of the demand curve fails to distinguish Marshall from classical thought whereby subjecting his “famous scissor” to Keynes's critique

The neoclassical conclusion that unemployment is necessarily all voluntary fails to apply to the involuntary unemployment phenomenon in modern capitalism and as we have seen, its problems have been pointed out and criticized by Keynes. In the next chapter, we will see how involuntary unemployment is allowed to occur in Keynes's macro model.

## **Chapter Two**

### **Keynes's Theory of Employment**

#### **The Effective demand**

Keynes's criticism of neoclassical employment theory shows that problems with their models cannot be fixed by increasing mathematical rigor so a new way of thinking about employment is required.

The best way to analyze Keynes's theory of employment is to begin in an economy with a random level of aggregate production. This level of production is not necessarily accompanied with full employment because in Keynes's opinion "the effective demand associated with full employment is a special case" and "such an optimum relationship can only exist by accident or design."<sup>[15]</sup> No doubt in this economy part of production will be consumed, while investments will remain for purposes of reproduction. The relationship between output after consumption and desired investment is the pivotal factor in determining the movement of employment. If the former is absorbed by the latter, current production would be sustainable along with the employment level. If it falls short of desired investment due to a rise in marginal efficiency of capital, productions will expand thereby encouraging more employment. The cap for such production expansion will be the full employment

level defined by neoclassical thinkers. But there is no reason to conclude that the market will automatically push the production to this cap. Such expansion can stop at any point below full employment level associated with a certain level of desired consumption and desired investment.

The sum of the amount of products which a community is expected to spend on consumption and the amount which is expected to devote to new investment is called effective demand, which, in Keynes's words, determines national output as well as the employment level. Obviously, this viewpoint counters the neoclassical system because it allows the economy to run below full capacity with involuntarily employed workers. If there is a shortage of effective demand and its required level of production is unable to utilize all the laborers available in the factor market, some people will be laid off involuntarily. Lower wages will make things even worse because a falling income for laborers due to a wage cut will render workers more hesitant to spend, thereby weakening the demand for new investment.

### **A volatile and pessimistic economy under Keynes' doctrine**

According to Keynes's arguments, a persistently high level of effective demand would enable an economy to operate at its maximum capacity, rendering involuntary unemployment to a minimal, if not nonexistent, level. But after examining the determination of effective demand, we find out that the tone of Keynes's doctrine is one of volatility and pessimism.

Effective demand consists of desired consumption and desired investment. The desired consumption (with a certain level of real income) follows a psychological law that “when aggregate real income is increased aggregate consumption is increased, but not by so much as income”.<sup>[16]</sup> It indicates that economic growth is accompanied with a constant or decreasing marginal propensity to consume, which requires increasing investments to sustain them. The desired investment is mainly determined by the marginal efficiency of capital and the interest rate. According to Keynes’ definition, “marginal efficiency of capital is being equal to that rate of discount which would make the present value of the series of annuities given by the returns expected from the capital-asset during its life just equal to its supply price”.<sup>[17]</sup> Since the marginal efficiency of capital implies the expectation of returns by investors rather than the objective physical efficiency of capital, it is to some extent a psychological factor as well. The rate of interest is thought to reflect the general liquidity preference by a society, which is once again a psychological factor. Since all important factors that determine general economic performance are psychological phenomenon, free market at its natural state can hardly ensure a stable effective demand. In an extreme sense, the employment rate might even become an index of mood.

According to Keynes’ notion of the propensity to consume, economic growth or an increase in income will extend the gap between consumption and income, maybe even at an increasing rate. Hence increasing new investments are required in order to sustain economic growth. That “investors would become even more sanguine about

further investing while less investment opportunities are left for them to choose due to decreasing consumption demand” is not at all convincing. Therefore, Keynes’s attitude to economic growth in fact is pessimistic. Under a free market, wealthier countries will have a harder time to further improve employment than those poor ones.

### **Free market VS government intervention**

In the neoclassical system, the market purportedly takes care of “everything”. People decide whether or not to work and unemployed laborers can always find a job as long as they overcome their laziness. Throughout competition, scarce natural resources are used to produce the most needed commodities while consumers efficiently allocate their incomes. In this prosperous scene, what role is there for the government? Perhaps a “nightwatchman”, or if market inefficiencies occur, then the government may seek to restore the competitive, optimal condition that a perfect market should automatically achieve. At the intersection of the aggregate supply curve and the aggregate demand curve, optimal conditions are ensured whereby government intervention only results in less efficient outcomes. A fiscal policy, say a government purchase, is carried out by sacrificing the consumption of someone else. If the purchase is financed, the fund is taken away from some other uses. Moreover, monetary policy will have no effect on economic performance and employment because money is neutral according to the quantity theory of money. Its consequences

are mostly realized as a change of the price level and a redistribution of wealth due to the value change of debts in money terms.

However, in Keynes's system, things are quite different. Since the nature of the market is volatile and pessimistic, government's efforts are required in order to help economic growth and improve employment. Using Keynes's models, the government prerogative is clear. On the one hand, fiscal policy will have direct effects on effective demand. On the other hand, since the rate of interest is determined by the general liquidity preference, thus authorities are able to affect interest rates through money supply and thus adjust desired investments. Keynes' version of interest shows the importance and effectiveness of governments' monetary policy in stimulating the economy.

Not only so but ever new spending created by government via fiscal or monetary policy will have a "multiple impact" on aggregate output as long as the full economic capacity is not achieved. This multiplier effect is based on Keynes's discovery of the propensity to consume. Since one man's spending is some others' income, a portion of which will be further spent and become the income of somebody else, an autonomous increase in spending by governments will generate a sequential series of new demands through a ripple effect. This multiplied increment of aggregate output, which equals to  $\Delta I / 1 - C$ , as a proximate number of  $\Delta I + c\Delta I + c^2\Delta I + \dots$  ( $\Delta I$  is new autonomous investment triggered by government's policy and  $C$  is the public's propensity to consume). Keynes points out that as long as the classical full employment level is not

achieved,  $\Delta I$  will bring about  $\Delta I/1-C$  output as a result. If  $\Delta I$  is financed by printing money, the price level will tend to rise but not as much as the amount suggested by the classical quantity theory of money. Once the full economic capacity is achieved, anymore  $\Delta I$  will only proportionally raise the price level and has no effect on output and employment. Therefore, Keynes's doctrine completely denies the neoclassical critique of government intervention. If what Keynes said is true, a wise government will be capable of maintaining a near full employment level. Large economic fluctuations due to consumers' or investors' mood changes (animal spirits) will also be minimized due to actions that governments can take to counter them.

Keynes's effective demand theory of determining economic performance (I think it was first introduced by Sismondi), provides a framework in which to analyze macroeconomic problems. His suggestion of government interferences in stimulating aggregate demand is also proven quite plausible by our past experiences. However, there is no denying that Keynesians oftentimes feel little helpless while dealing with major economic crises, not to mention preventing them from happening. Such a disappointing fact does not mean that Keynes is incorrect, but it did show that his theory is incomplete. Keynes noticed that involuntary unemployment exists because effective demand is weak, but he did not really explain why in modern capitalism there is this weak demand problem. It is my view that the potential for government to greatly influence effective demand is one that is much exaggerated. This may suggest much deeper problems inherent in the capitalist economic system. Therefore, it is

necessary to reexamine the demand problem with economic literature other than neoclassical ideas. In the next chapter, we will see mistakes that the neoclassical school made in their consumption theory which allows no possibility of the under-consumption condition. Then we will also see an alternative theory of consumption from David Levine, which can be better applied to the current involuntary unemployment problem.

## **Chapter Three**

### **A Study of Consumption Demand**

In Keynes's model, effective demand consists of consumption and investment, which determine the levels of output and employment. Since their contributions to economic performance are united, some might ask "if consumption demand is low, can we always increase investment in order to achieve economic growth? Or, if investment demand is weak, can we always encourage consumption to obtain the same result?" The answer is clearly no. Consumption and investment are in fact correlated, which means that the performance of one factor affects the other. Let's consider two extreme cases. If a particular country consumes 99% of its output and only invests 1%, will this 1% investment be able to provide even half of the consumption for the next year? Following the same logic, if a country can only consume 1% of its output and invest 99%, will producers, after seeing the miserable current consumption, be confident enough to invest even half the amount for the next year? Therefore, a strong effective demand is definitely not a result of unilateral contribution but combined efforts of both strong consumption and investment in a well balanced ratio. Let's now turn to the analysis of consumption.

## **Errors in neoclassical consumption theory**

### ***1. Misunderstanding of “wants” in Marshall’s demand curve***

Neoclassical consumption theory is constructed on three assumptions associated with wants and their satisfaction. The first assumption is that human wants are continuous. This implies that their satisfaction can be achieved via “utility” or “satisfaction”. In other words, individuals want something not for its particular or distinctive qualities but the “utility” that it generates. Consequently, there is not a specific want associated with a specific way of satisfaction. All wants are similar, thus people can hardly distinguish one from another. The second assumption is that individuals’ wants are infinite, thus cannot be completely satisfied. Moreover, since the satisfaction of wants can be achieved by uniform “utilities”, people’s wants for “utilities” are also infinite. The final assumption is associated with consumption. Neoclassical thought believes that the consumption of goods (or things) can generate “utilities”. More importantly, it generates nothing else besides utilities in terms of consumption. According to this argument all consumption is necessarily the same in terms of the satisfaction of continuous wants, thus different goods are fungible. It further consolidates the view that individuals desire “utility” instead of the particular and distinctive qualities associated with a thing. Since an individual’s want (for utility) is infinite, but the utility generated from the consumption of goods is finite, scarcity thus becomes one of the primary concerns of every economy.

Marshall's diminishing marginal utility theory is based on these three assumptions. It determines that as the consumption of a certain commodity increases, the utility from an additional unit decreases.<sup>[18]</sup> This theory, as well as the neoclassical consumption theory, tacitly admits two questionable ideas: 1. People can always consume multiple units of the same commodity and their wants for every commodity are infinite; 2. Consumption always takes place in a sequence, and there is enough time between two consumption points for consumers to realize that marginal utility is decreasing. The first problem is more fundamental than the second one because if we deny the idea that "wants" are infinite, we can automatically refute the time interval that is required to realize the reduction of utility since there is in fact no existence of utility during the satisfaction of wants.

Marshall asserts that "human wants are countless in number and very various in kind: but they are generally limited and capable of being satisfied".<sup>[19]</sup> This idea obviously contradicts the neoclassical idea of insatiability of wants upon which Marshall's demand curve is based. Marshall vacillates while analyzing the property of wants and its satisfaction. To some extent it appears that he realized the problem of "infinite wants" in the neoclassical system, which justifies the diminishing marginal utility theory. But because diminishing marginal utility is central to his system he fails to admit its mistakes.

Nevertheless, does diminishing marginal utility theory really describe people's consumption behavior? This question is crucial to our argument seeing that

neoclassical demand theory hinges upon it. Marshall's confusion implies that neoclassical demand theory exhibits fundamental problems. Meanwhile, an alternative opinion on "want and its satisfaction" is provided by Levine, Wilensky and other contemporary economists.

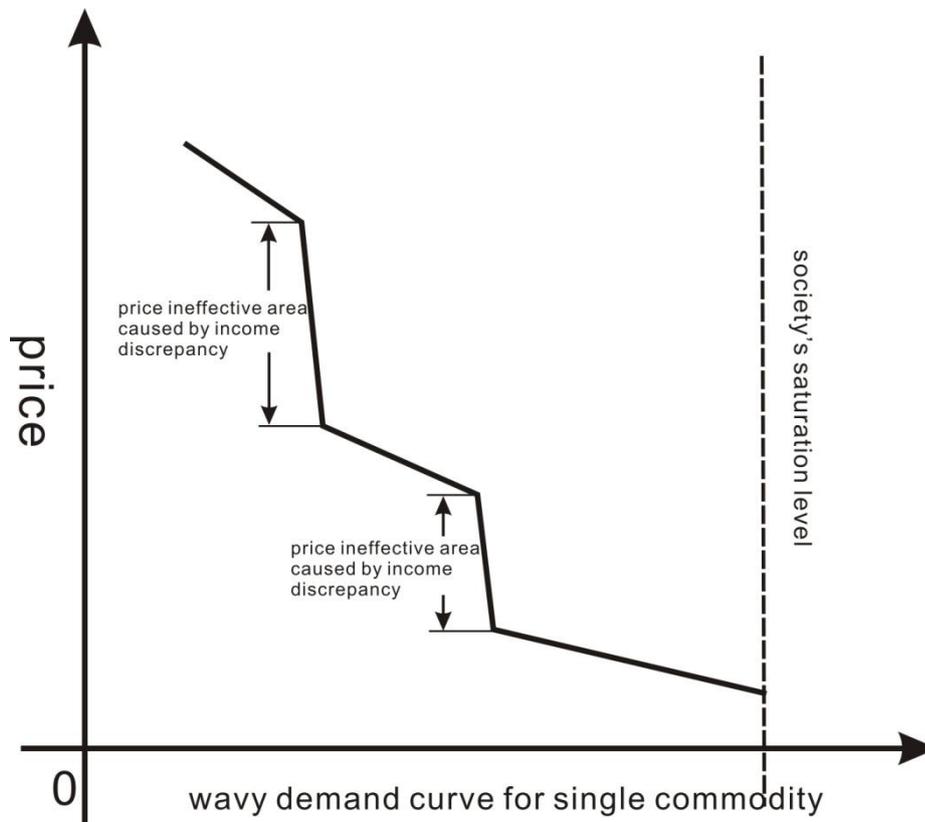
Alternatively, when people have a "want" (here the word "want" is not the same as in the neoclassical system), they usually go for a specific commodity or a set of commodities suitable for satisfaction. If this "want" is properly satisfied, people no longer demand these commodities under the same purpose unless the same "want" reemerges in the future. For instance, if a "want" of mine can only be satisfied by eating four hamburgers, the act of eating three will fail to achieve satisfaction. On the other hand, eating five hamburgers would be too filling and I would be worse off rather than satisfied. In addition, suppose there is a large hamburger that equals four of the regular ones and provides satisfaction after finishing it with no need for the extra hamburgers. Will I feel the utility from each bite decreasing? And what if my mouth is big enough to finish it with one bite? Because people are in fact "forced by social convention and the size of our mouths to eat the food gradually, there is indeed a process going on which can be seen in marginal terms. But what is also going on is that we are eating the amount needed to satisfy our appetite."<sup>[20]</sup> Not only does our example imply that the idea of diminishing marginal utility is to some extent impractical, it also contradicts neoclassical consumption theory. Neoclassical economists do not believe that "wants" are associated with a specific consumption. In

their opinion, since all consumption generates “utilities” that satisfy our wants, the amount of utilities that people can obtain during consumption is of primary concern. Our consumption habits, on the other hand, are not. Consequently, the above example of hamburgers cannot be explained by neoclassical ideas for two reasons: 1. Since wants are infinite and indiscrete, a “want” that can only be satisfied by four hamburgers does not exist; 2. Since the primary concern is the amount of utility generated during consumption, “hamburgers” are absolutely an insignificant factor in our example. It can be freely replaced by anything that is able to generate utility.

Marshall’s confusion propels him to justify his idea of diminishing marginal utility by demonstrating that commodities have alternative uses. However, the fact is that the majority of commodities do not have a variety of uses, or not enough to justify a downward sloping demand curve.

However, since it is true that the demand for a specific commodity increases with a fall of its price, we thus need an alternative explanation for the downward sloping demand curve. Here the income, rather than diminishing marginal utility, is the determinant. Since a capitalist society consists of different classes of income earners, when the price of a certain commodity falls, individuals of lower income, who previously could not afford such consumption, are now able to access the commodity. The increase in demand in this sense has nothing to do with the infinite consumptions of goods suggested by neoclassical theories. When repetitive purchases happen as a result of price cuts, the extra amounts are not required by current “wants”, but are

purchased with the purpose of saving for the similar “wants” in the future. This will to some extent weaken the future demand of the same commodity. In the long run, however, extra purchases in different periods will cancel out each other thus no repetitive purchase will be motivated under the purpose of saving. However in this case, demand is not as sensitive to a moderate price change, especially in a society where income discrepancy among different classes is substantial. Hence the illustration of the relationship between demand and price in a single commodity model should not be a smooth downward curve, but an unevenly distributed downward sloping yet jagged wavy line shown as below figure. The mechanics of such will be addressed in the final chapter.



## ***2. Hicks's indifference curve and its relationship with diminishing marginal utility theory***

Hicks, in contrast to Marshall, appears to be more straightforward. But interestingly enough, Hicks refuses to admit that his indifference curve is based on the same idea as diminishing marginal utility theory. Hicks in his *Value and Capital* determined that, people will show indifference about consuming different combinations of two particular goods (X and Y). Thus an indifference curve can be depicted to show all these consumption combinations with the same level of satisfaction. This indifference curve must slope downward and be convex to the origin. "The reason for convexity is that the marginal rate of substitution of X for Y, which is the amount of Y the consumer is willing to give up for an extra unit of X, decreases as more of X is acquired."<sup>[21]</sup> Since there are innumerable indifference curves available in a two-commodity model, each of which represents a certain satisfaction level, the maximized satisfaction can be determined by the point where the income constraint line is tangent to the highest indifference curve. Moreover, a price change of X will change the slope of the income constraint line thus changing the point of tangency. If we project every point of tangency between the "income constraint line" and their respective "highest indifference curve corresponding to different prices of X" into a quantity and price model, we will also get a downward demand curve for X. This alternative explanation of a downward demand curve makes Hicks think the conception of diminishing marginal utility is nonessential to the construction of the

consumer demand curve. It also avoids concerns with utility by using the concept of the marginal rate of substitution.

However, Hicks is in fact confused with assumptions that comprise his indifference model. First of all, “people will feel indifference about a series of different combination of different commodities” implicitly shows that the consumption of different commodities will generate a uniform and measurable “satisfaction”, which allows commodities to be fungible while consumers still feel indifferent. According to this argument, different wants are not discrete because their satisfactions are measurable in a uniform manner. Moreover, they are also infinite because the indifference curve never reaches zero. This is in fact a similar idea to Marshall’s measurement of utility by using money whose marginal utility is constant. Second, the convexity of the indifference curve shows that as the consumption of commodity X increases, its exchange value to commodity Y decreases. If the satisfaction of wants is uniform and measurable, the only explanation for a convex indifference curve is that as the consumption of a certain good increases, the satisfaction (utility) it generates declines in order to justify a convex marginal rate of substitution between two goods. It is exactly Marshall’s diminishing marginal utility theory! The truth is that “there is a set of marginal utility curves underlying every set of indifference curves.”<sup>[22]</sup> This alternative explanation of the downward sloping demand curve is in fact a complex version of Marshall’s diminishing marginal utility theory in the sense that its assumptions implicitly include Marshall’s ideas. The progress Hicks made on

Marshall's theory of demand is that he incorporates income into the discussion which allows for the analysis of optimum conditions in the consumer sector. This explains why Hicks is considered the pioneer of welfare economics.

Another important conclusion obtained from Hicks's indifference model is the substitution effect. Because people will feel indifferent among bundles that contain different quantities of the same goods in a two-commodity case, we can get the exact marginal rate of substitution. However, will people really feel indifferent just by consuming more substitutes? If not, the entire content of the substitution effect makes little sense. For example, I have a steak and a bowl of mashed potatoes for dinner and I have no intent of changing it. Suddenly the price of the potato is doubled. According to Hicks, I will consume more steak and less potato with indifference. However, though Hicks is right about people's reaction to a rising price of potatoes, the reason for consuming more steak and less potato might not be preserving my "want" for that particular meal. My "want" for dinner would never be fulfilled by consuming more substitutes because it requires a specific amount of steak and mashed potatoes. However, the consequence that some income is freed to satisfy other "wants" makes the deal acceptable.

Our entire debate on Hicks' indifference model focuses on whether or not there is a feeling of "indifference" during the satisfaction of wants. If we obey the neoclassical ideas of infinite wants and utility theory, "indifference" would be justified. However, if the fundamental idea of "wants" is misunderstood and different "wants" are discrete

and finite, the entire indifference model would collapse. This occurs because its prerequisite – the feeling of “indifference” among different levels of consumption which is based on utility theory – would not exist. My arguments have shown the difficulties of analyzing people’s consumption behavior via the neoclassical formulation of wants. Moreover, the existence of involuntary unemployment in modern capitalism indicates the ineffectiveness of the price system under the free market in adjusting the economy. If “want” and its satisfaction are indeed misunderstood by neoclassical economists, an alternative explanation is in need. We shall now reexamine the idea of “wants” and its concomitant explanation as “needs”.

### **Needs and their new meanings**

Neoclassical economists use the term “wants” to define peoples’ general motivations for personal consumption. It can also be understood as the reason why people enter into a relationship between individuals and means of consumption for their own sake. The idea of “wants” is absent of the force of necessity and this absence “expresses itself most clearly when neoclassical economists argue that the decisive aspect of consumption is choice among ends.”<sup>[23]</sup> Thus a person chooses one commodity over another not because he needs it but rather because he prefers it. It makes wants entirely arbitrary.

Neoclassical economists believe that wants and means to satisfy wants are independent of each other. On the one hand, wants are insatiable in a very strong

sense – people have infinite wants in regard to consumption at any moment. One can assert that individuals are never completely satisfied. On the other hand, the resources available to satisfy wants are fixed by nature and their quantity is also independent of wants. As a result, not only are people’s wants circumscribed by natural resources, but also, the primary goal of any economy is to deal with scarcity: to allocate limited resource (as efficiently as possible) among competing ends in order to achieve the highest satisfaction level.

However, if the neoclassical idea of “wants” is right, then the market functions perfectly and will achieve utility maximization. Moreover, there is no reason for the situation of under-consumption to occur because consumption demand associated with “infinite wants” should also be infinite. The demand problem associated with developed capitalism indicates the need to reformulate the conception of “wants”; David Levine has an insight on this problem in his book *Needs, Rights, and the Market*. Here I will borrow his ideas of “need” and show how the change of notion from “wants” to “needs” helps us elucidate upon the inefficiencies of demand within a capitalist economy.

### ***1. Subsistence needs in classical doctrine***

Generally speaking, the idea of “needs” implies the force of necessity or a requirement of life. The dependency of fish upon water serves as an apt metaphor. In fact, the idea of “needs” takes us back to the origins of economics. Classical

economists use the term “subsistence” to describe the minimum requirements that suffice needs in terms of the human being as a biological organism, thus allowing laborers to routinely participate in the production of “net products” (luxury or riches). The problem with this classical idea is that it treats laborers as “produced inputs” instead of humans. At least from the perspective of consumption, there is absolutely no personality involved in laborers’ consumption pattern. Every single laborer is assumed by classical thinkers to live on a rather similar basket of subsistence goods. Though classical economists did not clearly describe the constituents of this subsistence basket, one thing for sure is that this consumption basket does not allow for the cultivation of personality or distinctive modes of life. This idea denies the meaning of the market for laborers because the nature of the market allows its participants to find their means of consumption by and for themselves. The specific “subsistence basket” is predetermined for laborers and makes the existence of the market completely meaningless. This contradiction goes to the very core of the classical idea of subsistence needs.

However, the classical idea of needs is not necessarily incorrect. Its problem comes from specific limitations. Subsistence needs are indeed needs, but there are others as well. When our discussion of needs occurs in developed capitalism, subsistence needs are essentially dependent with other needs, which we can hardly separate from each other. In this situation, the idea of need presents a lot more contents than the classical school offers. Now the question is left as to how we should define those “other needs”.

How do they become the force of necessity without thinking they are requirements for a primitive human life?

## ***2. Individually determined needs***

When we say someone is different from another, we often refer to features of personality rather than biological makeup. According to Levine, personality has integrity, which means that the individual has his attitudes to the world and the realization of himself which he wants to preserve through time. “The concept of integrity refers to the internal coherence of the personality. It motivates or forces the person into a certain mode of life. The concept of mode of life refers to a set of actions and external relations through which the specific structure of the individual’s personality expresses and realizes itself.”<sup>[24]</sup> According to these definitions, if people lose the integrity of their being as unique individuals, not only would the internal coherence of their personality be damaged, but the external relations with the world would collapse, the result of which is the loss of social meaning. Based on this idea we can obtain a new meaning of needs with a general applicability: needs are the requirements for maintaining the integrity of our being as unique individuals. Its force of necessity is shown as serious damage to our integrity both internally and externally if our needs fail to be satisfied.

This idea of needs is also followed by three important conclusions associated with the demand problem. First, individual’s needs are correlated with each other and each

particular need contributes to a structure of needs that define our mode of life. Hence at a normal condition, the independent subsistence need as defined by classical thinkers does not exist. For example, when I have a need for dinner, I barely think what kind of foods can provide the nutrients that keep my body running. It should have my comfort flavor, dismiss my feeling of hunger, contain no meat since I am vegetarian, and the ambience is also important – I would rather refuse to eat my dinner if I cannot eat a meal at home with my parents. These needs are associated with the general structure of my needs for dinner. If only part of these needs is fulfilled, it would not be a dinner specified for my satisfaction. Levine's idea of needs is essentially different from the classical ideas that consider needs only at a subsistence level. Second, needs are not infinite and definitely satiable. In addition, each (individual) consumption decision is not based upon a random whim or preference. Rather, it is part of a coherent way of life that sustains the integrity of the individual's personality. The integrity of our personalities does not require unlimited goods. We have a definite sense of self with a definite personality, supported by a definite way of life. Therefore it only requires specific means of consumption that can satisfy our specific needs, which sustain our integrity. It certainly contrasts with neoclassical consumption theory since "unlimited wants" in the neoclassical sense (insatiability) are formless, and are never for particular things, just for more. A being with unlimited wants would have no personality as a result. Although our needs will change and expand with the development of our personality, the expansion of our needs as a result

of personality development will finally cease at death rendering our needs finite in the ultimate sense. Finally, since needs are satiable and their satisfaction depends on how our life mode can be constructed by available products, we can easily abandon the neoclassical standpoint of scarcity in satisfying wants and ground our analysis on the standpoint of wealth, which assumes that the scale of social production of useful property can grow with the expansion of needs. If the amount of wealth depends on social production that is not entirely resource constrained, production has the power to determine whether or not individual needs can be satisfied. Thus unsatisfied needs can always be fulfilled by improving production.

In order to distinguish Levine's idea of needs from classical thinking, I use the term "individually determined need" to describe needs beyond subsistence. However, as I have said, needs are correlated with each other so when it comes to their satisfaction, we absolutely cannot isolate the satisfaction of subsistence needs from individually determined needs.

### ***3. The development of personality and the satisfaction of needs***

When people have needs that cannot be satisfied in and of themselves, they will enter the market place for purposes of consumption. The existence of the market is basically manifested in two aspects: 1. The market is capable of providing consumption good that individuals themselves cannot produce. Otherwise, why bother? 2. Individuals have the freedom to choose the means of consumptions they need for

and by themselves. If the means of consumptions are predetermined, then it is known as rationing instead of using the market.

Generally speaking, there are three options people have in the market when they have unsatisfied needs. First, they can get the same basket of commodities all the time, the consumptions of which will help them maintain their existing modes of life completely. Second, they can look for something new to fit in their current mode of life with a good will that their personalities can be better expressed. Finally, they can aggressively try commodities inconsistent with their current life mode with the willingness to deny part of their personalities, and then define themselves with a “new life”.

The first situation will occur to a small subset after their structure of life mode has been well developed. This occurs because sticking to a basket of commodities requires that personalities absolutely cease to develop and so does the life mode constructed upon them. To most people, such a situation is not sustainable. The development of personality proceeds with the expansion of our knowledge about the objective world and ourselves. While the former is unavoidably learned during our daily contacts with everything, the latter expands and changes with the former. Unless people intentionally refrain from contact with the outside world, there is no way for the personality to completely cease to develop. The development of personality will directly result in changes of our life modes, which require new consumption experiences to better fit them. Hence our enthusiasm in regard to experiencing new

things never fades away. If new consumption bundles are available in the market, there is always a tendency for the demand temporarily or permanently to switch from old ones. If new consumption is not available, there are always requirements for new consumption to come out. Meanwhile, the demand of old consumption would decline because needs associated with old life modes will be gradually replaced by needs associated with new life modes, which is more consistent with the development of our personality.

The second situation is consistent with these arguments about the development of personality. But the problem is that when we have needs that the current consumption basket cannot fulfill, we always feel indecisive when we choose new commodities, which makes our decision looks arbitrary. Does it necessarily mean that we need to lend support to the ideas of choice and preference? The answer is no. Levine thinks indecision can arise for two reasons: First, “the outcome may not matter to us.” In this case, consumption doesn’t fulfill any needs. We are in fact not indecisive because our decisions have no basis. Second, “the outcome may be a matter of considerable importance and affect us deeply, but we may not know exactly how it will affect us. We may have real and important needs, but we may not know them.”<sup>[25]</sup> If we do not know something that exists objectively, we might be able to find out the answer by seeking help from others. However, if what we do not know only exist subjectively, our problem cannot be solved by making an arbitrary choice based on preference. Rather we must find it out on our own. Levine aptly points out that “much of life

consists of the effort the individual devotes to finding out how he wants to lead his life and therefore what he really needs.”<sup>[26]</sup> As a result, “consumption in fact is a learning process. When we consume a good, we engage in a social practice. By so doing, we understand the nature of our needs better than we did when they only existed as an ideal.”<sup>[27]</sup> During this process, mistakes are unavoidable, but it does not by any means show that people are making arbitrary decisions from their preferences. People are indeed looking for the right consumption bundles to fit their needs, but they often lack the knowledge about specific outcomes that can incur unexpected results.

The propensity for people to discard part of their personality and fundamentally change their current life mode rarely occurs. There are two reasons for such a phenomenon: 1. There is much more to the objective part of personality than just that what people happen to want to do requires other people. According to Levine, unless people can objectify their sense of self in the way that is acknowledged by other individuals, they will not be able to sustain the integrity of their personality; 2. Even if this prerequisite is satisfied, links between individuals and the society will result in tremendous costs.

People’s sense of self provides guidance for how they live their lives. However, the reality of such a life depends on their social meanings (not brain functions). With no interaction with the objective world, needs have little meaning to life. We refer to a certain life mode in the way our thoughts are actualized and achieved by our society.

For instance, my mode of life as a keyboard player in a band can only be achieved if there are musicians who I can play with and an audience who appreciates our music. Without these people, not to mention those instruments, the mode of life I desire as a member of a band can only exist as a projection. Therefore, the establishment of a life mode essentially implies our whole connection with the world. We cannot objectify our sense of self without following a way that is acknowledged by our society. Even if we objectify it with its acknowledgment, we might still destroy the existing bonds that often take an inordinate amount of time to reconnect. For example, what if I intend to abandon my life as a music lover and live like a warrior? This idea has to be acknowledged by other individuals in order to sustain the integrity of my personality as a warrior. Nevertheless, I would still lose the connections with people and things that came into my life because of music. In addition, it takes substantial time and effort to reconnect myself with the warrior. From the perspective of social meaning, people normally will not discard their personality and life mode unless they have no alternatives.

The transformation of life style associated with a change of personality will fundamentally change individuals' needs and their consumption patterns. They stop purchasing commodities formally possessed in abundance and seek goods that embody their new lifestyle. But, since they are unfamiliar with the new world they need to connect with it is very likely that they will explore new terrains in which mistakes may be made.

Levine's idea of "needs" allows the condition of under-consumption to occur. Since needs are finite, (if they are properly satisfied) they can be reduced to the point where demand is rendered moot. Thus the general glut in developed capitalism does not satisfy the conditions of wealth as defined by Levine. This is so because if commodities in the market cannot develop with the development of personality, the new means by which to construct a life mode required by developed personality is unobtainable. Some of our needs will remain unsatisfied and we will feel the damage to our integrity, even as some other products remain abundant. Moreover, even if the condition of wealth can be achieved, which means our productions are potentially able to satisfy every need that our society requires, the distribution problem will ruin it. "A sharply unequal distribution can create scarcity by stimulating the need of those at both ends of the scale. Poverty, then, is not simply the absence of wealth; it is the absence of wealth in the presence of wealth."<sup>[28]</sup> Unfortunately, the current demand problem in developed capitalism attributes to both of these problems.

Keynes in his *The General Theory* focuses on stimulating investments to counter economic downturns, which to some extent shifts our attention away from problems associated with consumption. However, a necessary argument about the relationship between consumption demand and investment demand is not provided by Keynes and consequently, by solely stimulating investment, the increment of aggregate effective demand is proven by history short-lived and unsustainable. So, there are three important things we need to know about the production side of modern capitalism:

1.The relationship between consumption demand and investment demand; 2.the production structure and the production purpose of modern capitalism; 3.The power of modern capitalist producers.

## **Chapter Four**

### **Investment and production**

#### **The incentive to invest**

When an individual decides to buy capital-assets and hire laborers to produce commodities, regardless of the usage of these commodities, we note this term as investment. By undertaking such a task his immediate consumption is sacrificed (This is a neoclassical idea. For Keynes, what is sacrificed is the liquidity of his capital-assets), whereby compensated with a particular return. Profits are thought to be the primary motive for every investment in a capitalist society. In the modern economy, profit is not an increment of real goods, but an increment of money. This should be exempt from price changes so its value is able to be maintained. Using Keynes's idea of money, profit is therefore the increment of wealth with perfect liquidity. With perfect liquidity, there is no constraint on the usage of profits. They can be consumed, reinvested, or even remain idle.

In the classical system, the rate of profit is thought to be historically determined. According to Ricardo's model, rent is not considered as a cost of production but a result of uniform price with differences in fertility of land in the market. Its average rate equals to the average productivity of employment minus its marginal productivity. The employment level is determined by real wage, which should equal to the cost of

subsistence. The rate of profit therefore equals to the marginal productivity of employment minus the average subsistence cost. We notice that the only two “determinants” (in terms of mathematics, but with no economic meanings) of profit in Ricardo’s model – the productivity of labor and the subsistence cost – are unlikely to vary in short term. Hence the rate of profit is considered predetermined by the market for a specific long period. Adam Smith believed that “profit would be in the neighborhood of approximately double the rate of interest on a well-secured loan”,<sup>[29]</sup> but he didn’t provide any evidences to show how this rate is obtained. In fact, no economic explanation for the determination of profit is given by classical economists. In the neoclassical system, profits only exist in the condition of imperfect competition. Perfect competition would compete away any profits and make the return to capital equal to the rate of interest as the reward for unpleasant waiting. However, some neoclassical economists argue that perfect competition allows for the existence of profits as the compensation for investment risks. Moreover, this rate is thought to some extent to be historically determined as well.

A predetermined rate of returns (either regarded as profits or interest) allows producers to enter the market with certain investment returns, thereby decreasing levels of uncertainty. However, since the classical theory is based on a non-existing “omnipotent market” where the failure of effective demand never occurs, Keynes’ definition concerning investment incentives proves to be the most apt. Since the market predetermined rate of profit is nonexistent, investors may refer to past

statistics for a generalized idea of the profit rate but this number does not guarantee any investment return in the future. As a result, the “expected” rate of profit, instead of the “predetermined” rate of profit, becomes the driving force for every new investment. Keynes uses “marginal efficiency of capital” to express the same idea. According to his explanations, the quantity of new investment is to a large extent psychologically determined in the short run. If all investors are simultaneously implanted with the idea that “the economy is on its way to prospering” by “Cobb” (the guy from “*Inception*”), in reality, we will have a temporary economic prosperity due to a strong investment demand. Whether or not new investments can be sustained depends on the profits materialized by the corresponding effective demand. Even though Keynes agreed that most people are rational and oftentimes react properly on existing experiences, he tended to place more emphasis on the power of “animal spirits”. This is one of the central ideas of Keynes’ prescription for instances of government regulation.

Moreover, the interest rate, as given in a new explanation by Keynes, still plays an important role in motivating new investments. For investors whose starting funds are financed, interest becomes the cost of finance that they take into account before investing. On the other hand, for investors who own endowments, interest is their opportunity cost of carrying out investing activities. In sum, Keynes’s believes there are two primary factors that directly affect the incentive to invest: the marginal efficiency of capital (or the expected rate of profit) and the rate of interest.

## **The effect of consumption demand on investment**

The effect of demand on investment (or production) might be the most pivotal argument because it is essentially required in order to make the necessary transition from the neoclassical thinking into Keynes' world, and thereby understanding the weakness associated with capitalism.

Neoclassical economists believe that the price system in the market will automatically reconcile all the demands and supplies into equilibrium so the failure of effective demand is impossible, especially in the long run. However, the price model constructed by Marshall as well as other neoclassical thinkers is based on an erroneous understanding of "want and its satisfaction". If individual want is finite and able to be satisfied, and different wants are discrete with each other, the price system would not function as well as neoclassical economists expect and the effective demand may be inadequate. This is also one of the central ideas of Keynes's *The General Theory* although he does not offer an explicit definition and understanding of "needs". Keynes determines that new investment is motivated primarily by the marginal efficiency of capital (or expected profit rate). Investors, before they take any actions, will calculate the present value of a series of annuities given by the returns expected from the capital-asset during its life time. As long as the expected present value is not below the supply price of capital-assets, new investment will be stimulated.

Since the series of yields from capital-assets usually cover a long time span, making predictions about them is quite difficult. Consequently, rational investors would prefer that their predictions are made on a solid basis instead of a “guess”. A primary basis of prediction is analyzing demand of their previous products or similar products in the market. These particular demands materialize the actual profits from previous investments. If such demands are strong, investors will be confident with the profitability in new investments; if such demands are weak, investors will prefer to keep the liquidity of their assets. When we apply this idea to the whole economy, we will see that the aggregate level of new investments, to a large extent, depend on the current economic environment. A thriving economic environment characterized by strong effective demand will encourage new investments. But a depressive economic environment characterized with weak demand will discourage investments, thus making things worse. This, in Keynes’ opinion, is the reason for business cycles.

Before we go any further, it is necessary to clear up the possible confusion about consumption demand and investment demand. As we know, the demand for new products can either be for consumption purposes or production purposes in mind: while some products are used for consumption, others become the means of production for other products. It is quite true that as the complexity of production increases, more and more producers are specialized in the production of factors, which might further be used in producing another factor. An obvious question reveals itself: can investment demand (demand of production factors) alone generate profits

to sustain the reproduction process and also the accumulation of capital? In other words, can investors make profit solely from the production of factors and completely overlooking consumption goods? If the answer is yes, Capitalism should never experience an effective demand problem. But unfortunately, this is similar to the idea of a perpetual-motion machine, which is impossible to achieve in reality.

Let's first consider profits in real term. In classical thinking, the effects of demand on production are completely ignored. As long as investments can generate an increment of real products, the positive answer to this question can be justified. However, unlimited production capacity of factors is not realistic. If the fertility of lands can be reproduced by absorbing the energy from the sun, when the sun is burnt out, earth is done unless we find another source of energy. However, there is little need to discuss whether or not the productivity of production factors is finite because the increment of "real goods" is not at all meaningful in our discussion. *Since profit is set in money terms instead of real terms, an increment of real goods might not generate any profits if their price falls substantially.* Money price, on the other hand, is not determined by production alone but by the interaction of both demand and supply. Without referring to the demand side, no price level can be determined. If we say that there are consumption demands because needs associated with consumption are required to be satisfied, why then is there investment demand, or demand of production factors? Because people can use these factors to produce other products which can be sold at a profit. But why then is there demand of those "other products"?

Because they once again can be used for satisfying needs associated with consumption or producing further products which can be sold for profits. We notice that as long as consumption goods are not yet made production steps into a circle – production factor to another production factor. However, no matter how long this repeating production process continues, it will finally end up with consumption goods. Producers cannot make production factors and profits indefinitely. Without use value, exchange value (price) would not exist and a commodity can no longer be called a commodity. Production factors have no direct use value, but a price is attached because they are used to produce something that has direct use value. In other words, no production factors will ever be produced if they contribute nothing to consumption goods, which have direct use value to consumers. For instance, if “screws” cannot be used to produce anything, or can only be used to produce garbage, can “screws” be called commodities and be able to demand a price? As a conclusion, investment demands alone cannot sustain the reproduction process in capitalism because every investment must be realized by consumption demand in the market. Hence the consumption demand is the essential part of aggregate demand and also the primary driving force of the economy.[30]

Now let’s turn to the effect of demand on investment via the interest rate. A high interest rate, no matter as a cost of production or opportunity cost, will reduce profit, thereby discouraging new investments. A lower interest rate, on the other hand, will encourage new investment. Assuming that the quantity of money is fixed, as well as

the liquidity preference of the society, all the money available in the market will adhere to the following motives: transaction, precaution, or speculation. If aggregate demand is weak, less money will be held for transaction and precautionary motives thus enhancing the importance of the speculative motive. As a result, the interest rate has to fall sufficiently in order to “exceed the expectation of some “bull” and so influence him to sell his bond for cash and join the “bear” brigade.”<sup>[31]</sup> In this situation, a rise of demand will have a negative effect on new investment through a rise of the interest rate. However, such an effect is often considered subordinate for the following reasons: 1. people’s liquidity preference normally changes with a change of their demands. Thus a movement of interest rates as a result of a demand change is always ambiguous; 2. It is discovered that when the interest rate falls below a certain point, the demand of money might become perfectly elastic with the interest rate. Thus, the interest rate loses its power in stimulating investment. It is well known as the “liquidity trap”; 3. When people decide to invest, they oftentimes are quite confident with the business outcome. Their perspective rates of profit therefore are normally much higher than the current rate of interest. It just makes little sense that investors would take action at an expected breakeven point, so a moderate change of interest has limited effects on new investments. Also, the ratio of debt to total capital may be more important than the interest rate.

As we can see, because consumption determines investment, and effective demand – the sum of consumption demand and investment demand – determines the rate of

employment and aggregate output, so the core issue in the involuntary unemployment problem now centers upon the failure of consumption demand. As we have seen, such phenomena can hardly be cured by adjusting the price and the interest rate.

### **Corporate industry and mass production in modern capitalism**

Corporate industry is characterized by mass production, which is based on large-scale machines, technology and advanced management techniques. Machinery and equipment become important in the production process and accounts for a substantial part of production costs.<sup>[32]</sup> The advantage of corporate industry, comparing to a craft economy, is that production is much more efficient in making mass goods thereby reducing production costs. Moreover, it provides the necessary capital pool for innovation especially for capital-intensive and high-tech products. Things impossible to produce in a pre-industrial system now come true.

In a craft economy, workers are the family members, or hired hands and very often apprentices, who live with the family.”<sup>[33]</sup> They are bound to their firms by personal loyalty and emotional ties. Every laborer is also specialized in their specific production process thus employers are hard pressed to find a replacement if their workers are laid off. However, corporate industry changes the role workers play in the production process. Since the production process is broken down by advanced management techniques, generalized skill sets are a prerequisite over those of a highly specialized nature. Consequently, the same job can be equally performed by different

groups of workers. Workers laid off in one industry can apply their skills in many others so there is no lack of replacements for absent workers. In corporate industry, the opportunity cost of firing a worker is quite low. Employers will not hesitate to do so if they think necessary. In addition, advanced technology and management technique allows flexible outputs and employment on the basis of fixed product designs in mass production. That is to say, by adjusting the pace of work determined by machinery, different amounts of products with the same quality can be produced at a nearly constant marginal cost.<sup>[34]</sup> Therefore, labor costs in corporate industry are no longer fixed costs. They now emerge as variable costs.

While employment and output are flexible in modern capitalist production, price remains inelastic to demand change. One reason for price rigidity is that technology makes storage of goods possible and affordable. If products cannot be sold immediately due to weak demand, producers store them and wait for demand to be restored. Nevertheless, demand rises with a falling price and so it still makes sense for producers to reduce the price of their products when demand is weak in order to rid themselves of their inventory and clear the way for new products instead of paying storage costs waiting for demand to pick up. But the reality of corporate industrial organization provides a different description. We already know that mass production requires a large amount of investment in capital-assets, which include land, buildings, and equipments. Such capital costs are of course fixed, and must be paid back gradually from the sale of products during their life time. With the modern banking

system, “current cost” is always amortized and spread out over a number of years. As a result, investors will carefully set their price with a long run consideration and make sure that the total revenue is enough to cover total fixed and variable cost. Keeping the long run consideration in mind, corporate industrial producers will negotiate relative long-term contracts with both their factor suppliers and retailers. They do not want their business plan disturbed by unexpected changes in the business environment. In this situation, reduction of prices will be dangerous for two reasons: First, consumers will accept a price cut at any time for obvious reasons. If prices were to increase though, they might express discontent by reducing current consumption or even switching to competitive producers. In addition, if consumers know that prices fluctuate, they are likely to withdraw their spending when prices are high and wait until they decrease. From this perspective a price cut by producers should be permanent, which can only be achieved by an improvement in efficiency instead of an adjustment to demand. A temporary price cut might help stimulate short run demand, but will harm long run revenues. Moreover, changing prices requires renegotiating contracts, which generates extra work and costs.<sup>[35][36]</sup> This might be the reason why modern producers would rather distribute coupons and promote sales events as responses to weak demand instead of prices. They want customers to know that price cuts are only a special case whereby preserving price expectations. Second, price cuts are carried out with the hope of selling more units, which will only occur if competitors do not follow suit. If their competitors follow (without an expansion of

the market or a rise in incomes) no producers will gain.<sup>[37]</sup> Therefore, cutting price is quite unfavorable in mass production. “Faced with a drop in demand, it is far better to sit tight, reduce output and variable costs by laying off workers, and wait for sales to pick up.”<sup>[38]</sup>

In corporate industry, employment and output is flexible, but price is rigid. Employment and output, instead of price, will be adjusted to aggregate demand. It is exactly what Keynes’ main argument is in *The General Theory*.

### **Supply creates demand in a modern sense**

Say’s law was of direct concern to Keynes’ analysis. The explanation by Say and J. S. Mill (from the perspective of “real means of payment”) is not persuasive, but they still achieve a valid conclusion. Supply indeed is capable of creating new demand, especially when that demand is realized as “individually determined needs”.

Satisfaction of needs requires two side efforts. Consumers need to realize the existence of their needs and discover them on their own accord. Producers need to produce commodities whose consumption is able to satisfy specific needs. Since people sometimes do not know their own needs or how consumption satisfies them, producers are able to introduce new products that fit into the life mode required by unsatisfied needs. New demand, as a result, will be created. Such creations are not thought to be done by the side of consumers because they are unclear about their needs or the means to satisfy them. New demands are in fact motivated by producers,

who create new “principles” for a better life which stimulate new demands. Without producers’ efforts, whatever consumers need might still remain covered or only exists as a vague projection.

For example, before the iPad was introduced, very few consumers had an image of something that functions and looks exactly like an iPad. However, after the iPad was introduced to consumers, they suddenly realized that the life mode this device can provide is suitable to their needs. As a result, using an iPad makes consumers feel better off since their unsatisfied or even unrealized needs are now satisfied. In this case, it is not just to say that the iPad market is created by a sudden increase in general demand. In fact, “Apple” created this new market thereby fostering additional demand.

The producers’ potential for demand creation is actually stronger than what the iPad example offers. In the market, consumers have the right and freedom to choose the commodities they want within their income constraints. But the market has no obligation to perfectly fulfill every need. According to Levine’s basic claim, the market should produce commodities just for the market itself, not for particular individuals. But these commodities should be such that individuals can make them their own, incorporating them in their own, unique ways of life. Therefore, commodities in the markets, in most case, are pre-constructed. There is no guarantee that every need can be fulfilled by the commodities available. If a certain need is left out, there is little consumers can do. This is especially true in modern industry where

exchange is characterized as “impersonal”<sup>[39]</sup> – every purchase contributes very little to the exchange outcome for capitalist producers. Consequently, capitalist producers have no reason to customize their products for every single consumer because their motive of production is profit rather than the happiness of consumers and social welfare. They aim at a specific consumer class targeted by their production plans at the beginning, and try to sell as many products as possible later. If producers cannot always be as good as “Apple”, they have to rely on advertisements which are potentially capable of leading consumers’ behaviors. Meanwhile, as many consumers are unaware of their needs they become susceptible to select advertisements. As a result, in the process of need satisfaction, producers to some extent have the power to guide consumers’ demand patterns and even decide the mode of life for them. Consumers (though they have the right to choose freely in the market) are limited by the provision of choices. With pre-constructed commodities and elaborately designed advertisements, people unconsciously live in a life designed by capitalist producers. Consumers are free only in terms of free choice making on available commodities, but considering their choices are pre-constructed raises concerns about their freedom.

Notice here the idea that producers’ power to create demand does not conflict with our previous conclusion that “individuals have to find out their needs on their own. Although the principle of a better life (which remains unknown to individuals) is created by producers, individuals are not forced to incorporate them into their life mode. They adopt them because they believe this principle is coherent with their

personality. As a result, their lives will be better off by incorporating those products, which happen to be what they really need. As long as people still believe their needs are properly satisfied, their integrity remains undamaged. It might be hard to fathom that our feeling of satisfaction and the condition of wealth to some extent relies on our beliefs. A very simple example will prove this idea. I think all faithful disciples of any cult believe what they are doing is what they need. They actually feel happy and satisfied in their life mode even if the pursuit of that “distorted faith” requires them to sacrifice their lives or even hurt others. So for a capitalist producer, creating and cultivating consumers’ beliefs might be more important than what to produce since from the perspective of producers, the former is an active controllable task, but the latter is a passive task that contains more uncertainty.

The capitalistic production structure to some extent reflects the ideology of capitalism. The ideology of capitalism on the other hand shapes the demand pattern of capitalist class who own the majority of the national income. In the next chapter, we will see how the capitalistic production and demand pattern, both of which are determined by the ideology of capitalism, contradict with each other and thus beget the inherent weakness of capitalism – under consumption.

## **Chapter Five**

### **Problems with the Superiority of the Modern Capitalist System in terms of Effective Demand**

#### **The distribution problem in Capitalism**

The economic world we live in is not perfect, and it might never be. Neoclassical thinkers hold utopian view of the perfectly functioning market place. Unfortunately, the market is not as omnipotent as they thought, and not surprisingly, economies under neoclassical doctrine were not immune to economic fluctuations. The emergence of Keynesianism changed the way that people thought of the economic world: Effective demand as a primary driving force for a better economy was unveiled. In addition, the failure of the market in reconciling demand to supply as well as the power of “animal spirits” in affecting economic performance were realized. Government intervention is thus advocated by Keynesians to counteract economic downturns, but once again, the power of governments is overstated. The government is able to use monetary and fiscal policy as a means to temporarily mitigate economic crises, but their effects are often short-lived and ineffective. Such limitations of government actions require further reflection upon the capitalist system. It is possible that some of the problems associated with effective demand in a capitalist society are

not because people get lost in an abnormal condition. Instead, they are caused by the “inherent weakness” of the capitalistic system. To explore these “inherent weaknesses” of capitalism is the concern of this section.

### ***1. Unevenly distributed wealth***

Marx is the pioneer economist to criticize the injustice of distribution of wealth in capitalism with systematic arguments. He believes that the primary goal of capitalism is to assure a certain long-run rate of accumulation. Real wages, in addition to the employment rate, are adjusted freely so as to make the rate of capital accumulation possible. Since Marx did not manage to detach himself completely from classical thinking his analyses focus on the cost of production. According to Marx, since all the net products are distributed between capitalists and laborers, the real wage has to be depressed to the point whereby guaranteeing a given tread rate of capital growth. However, it does not necessarily mean that the real wage is unable to rise. Marx argues that since the real wage is a function of the degree of unemployment – the ratio of unemployed to employed people – in the long run, a rise in the real wage can be achieved by a decline of relative unemployment. Marx justifies this idea by saying:

“In a developing capitalist system, the rate of accumulation can easily exceed the growth of population, because the very process of accumulation will lead to dispossession of small proprietors and bring new recruits into the army of industrial workers.”[40]

In addition, he thought technological progress could help relative employment growth.

“Marx shows again that the process of technological improvement is itself influenced by the pace of accumulation of capital: if this exceeds the growth of the labour force, and relative unemployment therefore declines, a tendency for real wages to rise will set in”. [41]

However, to argue whether or not the real wage can rise in capitalism is not Marx’s intention. What he really wants to say is that *real wages can never rise proportionately to the increase in the productivity of labor*. In other words, laborers are exploited by capitalists during production and as the capital accumulation increases, the rate of exploitation follows along with income discrepancy. As a result,

“Even though the consumption of the worker has risen, the social satisfaction which it grants has diminished in comparison with the greater enjoyments of the capitalist in which the worker has no part, and in relation to the stage of development reached by society in general.” [42]

Marx claims that in capitalism technological progress will not increase with the real wage commensurately because capitalists intentionally depress the real wage by “increasing the competition among workers and weakening their bargaining position” [43]. They achieve this goal by introducing labor-saving innovations to displace labor by capital. This effect can be demonstrated by Josef Steindl’s model in his *Maturity and Stagnation in American Capitalism*:

“Assume that technological progress proceeds, involving a continuous increase in net real output per worker employed, and that the ratio of capital invested to net output remains constant. Net output and capital invested therefore grow at the same rate, and this rate is, on our assumptions, greater than the rate of growth of labour force employed. Thus, if we assume a given trend rate of growth of capital, the rate of growth of employment must fall short of it; the difference will be simply determined by the increase in productivity per unit of time.” [44]

However, this cannot be Marx’s entire argument. Since the model is based solely on the assumption of a given trend rate of accumulation – which is given by Marx at the

very beginning – if the ratio of capital invested to net product is constant, there will be an increasing rate of accumulation. This observation counters his first assumption. It is therefore essential to assume an increase in the ratio of capital invested to net product. This argument, as a supplement to his previous conclusion, shows that capitalists intentionally sacrifice the efficiency of their capital by replacing labor with capital under the name of innovation in order to maintain their product share.

The assumption of “an increase in the ratio of capital invested to net product” is in fact quite vulnerable to empirical data from modern capitalism. Steindl shows that the ratio of net business capital to national product does not seem to have increased at all since the first decade of the century. In addition, the share of labor in the product does not show any marked tendency to fall in the later stages of capitalism. In my opinion, Marx’ conclusion does not conform to empirical data although not due to his argument of “an increasing share of capital in the net product”. Instead, it might result from the fact that Marx’s conclusion is obtained in a steady growth model where consumers’ taste and the relative importance of capital to labor in production remain constant. In reality though, our economy experiences substantial transformational growth during this period. That is to say, the capitalist inefficiencies central to Marx’s analysis might be overshadowed by positive exogenous forces.

Marx provides a lot of insights into the distribution problem associated with capitalism, but his criticism fails to arouse attention in capitalist societies for many

reasons. The most important reason is that Marx's ideas challenge the principles of capitalism and stand against the interests of the capitalist-class.

Why are capitalists so dominant in determining the distribution pattern in capitalism? Marx partly supplies the answer. First, as the accumulation of capital proceeds, wealth is gradually centralized in the hands of fewer and fewer capitalists. This occurs because "the very process of accumulation will lead to dispossession of small proprietors, and bring new recruits into the army of industrial workers" [40]. On the other hand, the real wage has difficulty increasing since capitalists keep innovating in order to displace labor by capital. As a result, the relative abundance of labor to capital has the tendency to increase. Labor, therefore, must compete for limited capital. Second, the increasing complexity of the production process raises the importance of capitals to labor as production factors. While capital is getting more independent in production, laborers can hardly produce any modern products without capitals. Finally, the endowment discrepancy between the two classes makes labor more desperate to work than capitalists to invest. If capitalists stop producing there is no problem to secure their lives for a long period of time considering the wealth they own. But if laborers stop working they have no means of payment and thus are isolated from social exchange.

Till now, our discussion of distribution has been confined to the production side. However, the purpose of this thesis is not about social justice, but how to cure involuntary unemployment associated with under-consumption. In the following part,

I will turn to the demand side and show why sharply unequal distribution is responsible for under-consumption in capitalism.

## ***2. Its affect on consumption demand***

If every single person (no matter what class they belong to) is able to utilize their income in a similar way, there will be little reason to discuss distribution. The change of distribution will not affect the aggregate demand pattern. However, people's economic behaviors not only vary with income, but are also characterized by their social class. Hence income discrepancy among different social classes will seriously affect the overall consumption and investment pattern.

According to Keynes' psychological law of consumption the marginal propensity to consume will stay constant or fall with a rise of income. In addition, we know that the average propensity to consume is lower for higher income households. This law implicitly expresses the idea that more consumption will be motivated if wealth can be distributed more evenly, which can be easily obtained from the following inequality:  $a\Delta Y - b\Delta Y < 0$  ( $a < b$ ), where  $\Delta Y$  is the deviation from even distribution, **a** is the average propensity to consume above evenly distributed income, and **b** is the average propensity to consume below evenly distributed income. If Keynes is right about this psychological law of consumption, a capitalist system will under consume. As a result, increasing investment required by capitalists might not be fulfilled. Sweezy also expounds upon this idea:

“As long as the national income rises at a constant rate, or a declining one, the capital stock should also rise at a constant rate, or, or even only at a declining rate, to assure full utilization. But a continuous rise in national income involves a rise in surplus value, and *a fortiori* a rise in the rate of investment. Now a rise in the rate of investment, of course, implies that the capital stock will not grow in a linear fashion, but at an increasing rate: which clearly cannot be reconciled with the requirement of full utilization”.[45]

This argument implies an increasing discrepancy between effective demand and production capacity.

To justify Keynes’s psychological law of consumption, we need to refer to David Levine’s consumption theory. My previous arguments have shown that needs are finite and thus can be satisfied. However, there is an exception---the need for “more wealth”.

“When being wealthy becomes an end in itself, independent of any structure of need, the finiteness of need breaks down. If the idea of acquiring wealth in order to be as wealthy as possible becomes an element of my personality structure, then my need for wealth can never be satisfied since it does not fix upon a discrete group of useful objects”,[46]

Thus the need for more wealth can only be satisfied by degree. Capitalism in fact provides a favorable environment for the capitalist class to cultivate such a personality structure. Not only do wealthy people enjoy a higher social status, but the distribution pattern gives them the opportunity to become even wealthier through capital accumulation. Some small capitalists indeed are driven out of business by competitions, but others grow quickly. They even get privileges in production from exclusive cost advantage, which facilitates further accumulation. It is not hard to imagine that as the accumulation process continues (and wealth concentrates) the

needs (being wealthier) of few (capitalists) trump the consumption needs of the many (laborers). Capitalists gradually lose their interests in consumption because most of their needs associated with consumption have already been satisfied or become much less important in their lifestyle. Their obsession with wealth let them forget the meaning of wealth because wealth for them no longer relates to any regular consumption. But the continuation of investment and production becomes the primary mission during the process of chasing higher social status.

Thorstein Veblen in his book *The Theory of the Leisure Class* provide a similar idea by arguing that the economic life of the leisure class (the ruling class) driven not by consumptions associated with regular needs, but by putting their reputability and opulence in evidence by their consumption pattern.<sup>[47]</sup> Such purpose of consumption, if we lend support to Levine's idea, comes from the fact that the leisure class's integrity of personality relies on the acknowledgement of their superior social status by the society, which is consistent with Levine's argument about the pursuit of wealth by the capitalists. However, Veblen further concludes that a great amount of conspicuous consumption from the leisure class will be motivated with the purpose of demonstrating status through showing how much wealth they have. This standpoint to some extent contradicts my previous argument since the motive for conspicuous consumption is not to satisfy wants and needs, but consumption as part of effective demand is nonetheless emphasized. To clear this confusion, we need to notice that Veblen's argument is based on his study of primitive tribe life. (He also thinks that

modern society inherits some of its features, thus much of today's society is a variation on early tribal life.) In primitive society, conspicuous consumption, such as using precious metal, might be the only way for leisure class to show off their wealth, thus demonstrating their superior social status. The same thing is indeed still happening in modern capitalism but its importance becomes much weaker. As the development of financial markets, money gradually displaces real goods as the measurement of wealth thus conspicuous consumption is no longer essential for flaunting wealth. Assets as numbers in bank accounts also count. In addition, the advanced mass media in modern capitalism allow a higher social status associated with more wealth to be acknowledged by others even if wealth exists in an intangible form. (A magazine called Forbes dedicates itself to revealing the richest people on the earth and the unit that it uses to measure personal asset is dollar.) On the other hand, the ideology of primitive tribal society discussed by Veblen is fundamentally different from that of capitalism. The pursuit of higher social status in early tribal life was achieved mostly by conquest of some tribes over others. However in modern capitalism, the pursuit of higher social status is mostly associated with wealth in money term rather than physical power or ownership of women. It is achieved by capital accumulation through reproduction process. Since conspicuous consumption is no longer an effective way to flaunt wealth and the pursuit of higher social status and more wealth can only be accomplished through investments, the motive of conspicuous consumption in capitalism is much less strong than that in pre-industrial

times. Conspicuous consumption cannot save capitalism from the under-consumption problem.

The concentration of wealth is also accompanied with “the power to command” as wealthy people can determine the dispose of wealth. For example, large shareholders can independently make business decisions without listening to those of small shareholders. The accumulation of wealth trumps that of consumption while small shareholders are forced to follow suit in the quest for profit.

According to our previous argument investment and production, without enough consumption to realize final products, are unsustainable. Moreover, the unrealized part of investment brings another severe efficiency problem into our analysis of capitalism – excess capacity.

### ***3. Excess capacity and idle capitals***

*The Kuznets curve* indicates the relationship between inequality and growth over a specified time period of capitalist development. Obviously, the left half of this curve is consistent with Marx’s criticism because it illustrates a rising inequality of distribution over the development of capitalism. However, the other half tells a different story. It suggests that the maturity of capitalism will reduce the inequality of distribution because there is a tendency for profits to fall relative to real wage. Does this necessarily mean that capitalism is able to cure its distribution problem in the process of its maturity? The answer is no. That profits fall relative to the real wage

does not demonstrate a shift in actual income from capitalists to workers. Instead, it falls because of a shift in the potential income of workers to excess capacity due to a reduced degree of investment utilization. Although national income does increase, the negative effects of excess capacity on the aggregate economy could be overshadowed by technological progresses or transformational growth. That is to say if capitalism is running with less excess capacity it can potentially perform much better.

What then is excess capacity? Excess capacity is the amount of productive capacity generated by fixed factors above the amount required by market demand. In other words, it is the capital assets that cannot be utilized in production due to insufficient product demand. Excess capacity in mature capitalism causes productive labor, which can be varied while fixed capacity cannot be varied, to become idle. The disadvantages of holding excess capacity are quite obvious: 1. It raises the current cost of new investment deterring new competitors and weakening competition; 2. It increase the costs of operation (maintenance of equipment, etc) whereby raising production costs and prices; 3. It drives down the wage level and weakens the demand from working class; 4. Resources are wasted on idle production factors that are not productive. But with all these obvious disadvantages, why do capitalists still hold a large portion of excess capacity?

The most popular argument is associated with the fluctuation in demand and competition. If producers are not able to expand production when the economy is booming but his competitors can, he will lose his market share. While the majority of

producers in the market choose to hold excess capacity, the opportunity cost of foregoing such a decision is bigger than holding excess capacity itself. Moreover, there are two general reasons: 1. It is believed that new producers will face a “restricted market” as it takes time to advertise and earn consumers’ trusts. The growth of the market needs to allow for new producers to meet the conditions of a full market even though initial demand is much lower than designed capacity; 2. The indivisibility and durability of plant and equipment make gradual expansion of capacity with the growth of the market unfeasible. When the market is growing and demand is increasing, physically limited production will prove deleterious. In this case, an expansion of capacity might be achieved by relocating the business, replacing expansive equipments or even rehiring staff, all of which take a tremendous amount of times and loss of a “lifetime business opportunity”. Producers are willing to hold excess capacity at the beginning in order to avoid such an occurrence.

The deliberate holding of excess capacity cannot be entirely regarded as a waste caused by imperfect competition since the fluctuations of demand in capitalism require elastic supply. Thus, the problem of short term excess capacity is usually solved in the long run. But our problem is that mature capitalism can generate excess capacity beyond simply dealing with demand fluctuations. It will increase to the level where further investment and employment deteriorates while current production suffers from low efficiency.

There are generally two reasons for such an occurrence: First, in a perfectly competitive market as defined by the neoclassical school, there is a natural rate of profit (or rate of interest) across industries. Competitions will depress this rate as low as possible. In this situation, little space is left to small producers to carry out price cuts for fear of taking a loss. However, as capitalism develops, some producers gain exclusive cost advantages through innovation or production privilege. They are then able to drive out marginal producers via price competition. The maturity of capitalism is therefore characterized by oligopolistic market conditions during the accumulation process. A small number of producers in every industry then would be capable of controlling price. In addition, oligarchs have a quite weak incentive to gain more market share through price cuts. If their competitors follow suit, no market share could be obtained and the whole industry would experience a general surplus loss. In mature capitalism, therefore, the profit margin for oligopoly producers is quite high. High profit margin means a low income share for laborers whereby profits will have a hard time being realized. As a result, a large portion of capital will be randomly invested on expanding current productions which are quite saturated and non-profitable for the reason that the process of accumulation requires nonstop investing but there are not enough investment opportunities to absorb all the desperate capitals. Excess capacity is in fact a result of the failure of effective demand. Moreover, it will increase with a rise in the profit margin along with an increasing income discrepancy between capitalist and working classes.

The other reason for undesired excess capacity is associated with the generosity of the banking system. New producers are inexperienced. They only have limited knowledge about the market they face. But they are sanguine about their business and usually have the typical capitalists' personality in heart – more is better. They often prefer growing to steady businesses so as to enlarge capacity. The scale is thus physically limited by initial funds. If new investments are financed by their endowments, investors' ambitions might be to some extent restrained by the fear of losing everything. However, if new investments are financed by the banking system, the amount of credit will set the scale of productions. If their businesses succeed they will be the biggest beneficiaries from leverage. If they fail, on the other hand, they can walk away. However, in capitalism, “upon reaching the stage of maturity, there becomes agglomerations of finance seeking investment outlets.”[48] The banking system, as a big pool of those desperate capitals, must be generous on credit for every potential opportunity that allows capitals to grow, but the problem of under-consumption in modern capitalism will set the limit on available investing opportunities in the market. However, when an economic downturn begins, the banking system will be under-willing to supply any funds even for healthy investments, thus accelerating the advent of recession.

## **Steady growth, Transformational growth, and the Development of needs**

Certain facets of capitalism have their strong suits. The pursuit of wealth based on private property has been historically proven as an influential motive of economic development. Capitalism, with its superior stimulation mechanism, is able to provide effective transformational growth, which is essential for production to keep pace with the development of individually determined needs.

If we open an average economics textbook and come across some theories about economic growth, they oftentimes imply steady growth.

“Steady growth means ‘straightforward swelling-up’, with no new products or processes. It is growth in which everything becomes larger in absolute size due to a rise of productivity. Of course there is more income, but the income is distributed in the same way among labor and capitalists”.<sup>[49]</sup>

For the sake of achieving steady growth, economic models are utilized. But is steady growth really what modern capitalism needs in the long run? Unfortunately economics concentrates on less important but more tractable questions at the expense of more fundamental concerns. The capitalistic system is unable to sustain a long run “steady growth” because pure steady growth must end in stagnation.

The first problem with steady growth concerns consumption. A reduction in price will not necessarily motivate current consumers to consume more of the same good associated with certain needs. Nevertheless, a rise in income or a fall in price, as a result of steady growth, will motivate more aggregate demand anyway as higher grade consumption becomes affordable to lower social classes. However, such a rise of

demand in a capitalist system will not be proportioned to the growth of production for three reasons: First, capitalism encourages an increasing income discrepancy between the capitalist class and the working class. A steady growth will bring a relatively small amount of wealth to working class while increasing wealth for owners of capital. With large income discrepancy a moderate steady growth will not make higher grade consumption any more affordable as the increment of workers' incomes is too small to overcome the "grades" among different consumptions. To overcome such big gaps requires the steady growth to be enormous, which is hard to achieve in the short run. The second reason is associated with "needs". If we use extreme criterion from the perspective of production, all the products can be classified into two categories: one is resource-intensive (luxuries); the other is efficiency-intensive (necessities). The production of resource-intensive commodities will not be affected by a steady growth because its production is dependent on a non-growing resource. With an inelastic supply a steady growth will bid up the price of resource-intensive products increasing its relative scarcity. Meanwhile, steady growth will substantially decrease the price of efficiency-intensive commodities because its production efficiency will be improved. But in mature capitalism the consumption of efficiency-intensive goods is already quite saturated. A reduction in price will not encourage more consumption because needs associated with those products have been satisfied and consumptions beyond such a point are unnecessary. For example, a steady growth will reduce the price of a Honda Accord (or cars of the same class) because of a more efficient production

process. But it will not tremendously boost the sale because everyone who needs cars as a mean of transportation in the U.S already possesses one. A steady growth will even raise the price of a Lamborghini Murcielago because its production is so limited by resources – rare metals, high-class leather and top engineers. With an inelastic supply, consumption physically cannot grow. In both cases, consumption fails to grow in a steady manner. Finally, steady growth is not capable of catching up with the development of personality in the long run. As we know, steady growth brings no new consumption potential. If the new mode of life stimulated by the development of our personalities requires consumptions that current products cannot provide, the demand of current products physically cannot increase with an overall quantitative growth.

The other problem with steady growth is associated with investment. If neither new products nor new processes are being introduced by a steady growth, the same products will be continuously produced by the same equipments and stuffs, under the same management and building. Even if new investments are required to expand current production, the majority of previous investments will be kept since under the same production process, it is unnecessary to replace them. Thus a steady growth does not require as many new investments as transformational growth does.

While steady growth ends in stagnation, transformational growth can not only boost the consumption of current products, but also expand the market in multiple directions. Transformational growth is characterized by innovations on products. New products and processes bring about a new principle of life, which can be applied in a variety of

contexts to encourage more innovation consumption. Hence, the development of individually determined needs is enhanced by the sustainable and self-motivated character of transformational growth. In other words, transformational growth is able to constantly create new needs and help/guide individual achieve new modes of life. Moreover, new products and processes will partly replace old ones thus creating new fields for investment. With different production processes new equipments, new plants and even new workers are required, thus providing catalyst for investment. In this situation, if workers are replaced it is an opportunity to replace inefficient workers with more efficient workforces as seniorities are no longer useful in such a new production environment, hence production efficiency is also enhanced. More importantly, an epoch-making innovation under transformational growth will not only induce the investment for itself, but create multiple new fields for investment thus once again shows its feature of self-motivation. Transformational growth will also change the pattern of income distribution via the abundance and importance of labor to capital in the production process. The tendency of current transformational growth is characterized by the internet and social networks. This indicates an increasing importance of human intelligence and relationships to “machines” in the production process. When capital becomes a more abundant factor to labor in the production process, the distribution pattern will shift to labor thereby narrowing the income discrepancy between capitalists and laborers. Even if growth temporarily returns to a steady rate, more consumption will be stimulated due to the emergence of larger

middle classes of consumers. This redistribution of wealth might be the most important reason why transformational growth is required.

### **A Dilemma**

Transformational growth is not a cure for under-consumption in mature capitalism. It will surely (to some extent) mitigate it, but not enough to assure constant consumption demand required by capitalists. The problematic distribution pattern in capitalism is overlooked because the economy is still growing, even at a fast pace during some periods. But very few economists have mentioned what the economy could be like if such a problem did not exist. It should grow at a faster pace providing better life for everyone with less discrimination and crime, and with much less economic fluctuations. Indeed, if transformational growth can be maintained at a high level the demand deficit caused by the distribution problem will to some extent be overshadowed by our technological progress. But transformational growth itself is quite limited and volatile. In most case such growth is triggered by unexpected discoveries and innovations which are not controllable. No doubt that technological progress will encourage transformational growth, but improvement of technology is also a result of compound efforts. A better education will definitely help it develop, but there is no guarantee that certain achievements will surely be done if investment is made in education. In addition, the outcome of investment on education takes a long time to be seen, so if all producers are waiting for a cutting edge technology to show

up, they will die before it actually happens. It is just not wise to solely rely on “unpredictable” and “unsustainable” transformational growth to save us from stagnation. The distribution problem is always there, dragging our economy backward regardless how much effort we make on improving technology. Unfortunately, solving the distribution problem in capitalism will prove to be quite difficult. Ultimately, we obtain an idea of what capitalism could be. If the distribution pattern has to change, new social structure might be required. But there are not any available social structures which have a stimulation mechanism quite like capitalism. Hence we are caught in a dilemma – a just distribution pattern or a superior stimulation mechanism. If we have to keep capitalism, the only thing I believe can help our economy consistently prosper is to expect every capitalist can commit them to charity and at the same time pursuing “wealth” as desperately as before, which obviously will never happen; or we could tax them heavily, which also won’t happen since most of our governors are capitalists themselves.

## Summary

I started my research within the neoclassical system but the results disappointed me. Very few contents about the theory of employment can be found since neoclassical economists think that unemployment should be voluntary, thus it is not a social problem. Its conclusion is opposite to what we experience in the modern economy, thus there has to be something wrong with their assumptions. The answer is found in Keynes' *The General Theory*: The utility of the real wage might not be the sole determinant of labor supply and more importantly, Say's law and even Marshall's equilibrium model suffer from mistakes.

The problem with Say's law is quite obvious if we lend support to Keynes' idea because if money is not neutral then Say's law will not hold. In Marshall's price model, I don't see any problems from the production side because the production and distribution pattern is supposed to be arranged in that way in capitalism. So the problem has to come from the demand side.

My biggest concern with the neoclassical theory of consumption is the arguments associated with "want and its satisfaction". To neoclassical economists, wants are formless. Individuals want something not for its particular or distinctive qualities but the "utility" generated from their consumptions. Moreover, individual's wants are infinite in a very strong sense and thus can only be satisfied by a degree. In this case,

the situation of under-consumption is logically impossible to occur in free markets. However, it is quite hard for me to believe these ideas after I reflected my own consumption behaviors and also studied others'. I can hardly find any similarities to these arguments. Moreover, the neoclassical model cannot apply to the involuntary unemployment phenomenon in modern capitalism. So I abandoned the neoclassical framework and looked for an alternative solution.

I believe Keynes has provided the right framework to study the economy at the macro level. He thinks national income and the employment level are determined by the effective demand, which consists of consumption and desired investment. However, the effective demand associated with full employment is a special case so the maximum capacity of an economy can only exist by accident or design. Therefore, the neoclassical conclusion that the free market can automatically achieve maximum capacity, which is based on the assumption of formless and infinite wants, is incorrect. Economic performance always fluctuates with the change in effective demands.

The consumption theory from David Levine makes much more sense to me so in my thesis I borrowed his idea to reexamine the demand problem. First of all, Levine replaces the word "want" with "need" because the idea of "wants" is absent of the force of necessity, thus allow people to make arbitrary consumption decision based on random whims or preferences. In addition, Levine's needs are quite different from the classical idea of "needs" which is only associated with subsistence. According to Levine's arguments, individual's distinctive personality has integrity, which means

individual has his own unique attitudes to the world and a realization of himself that he wants to preserve through time. It motivates or forces this person into a certain mode of life, through which the specific structure of his personality expresses and realizes itself. Thus, needs are the requirements for maintaining the integrity of our being as unique individuals and its force of necessity is shown as serious damages on our personalities if needs fail to be satisfied. We call needs in this sense “individually determined needs”.

Based on Levine’s explanation, the situation of under-consumption can be perfectly explained from two perspectives: First, needs are finite and satiable. In addition, each need requires specific means of consumption. Hence, if markets fail to provide all the means required by our desired modes of life, some of our needs would remain unsatisfied while some other products in the market are too abundant for us. Second, even if the production is potentially able to satisfy every need that the society has, a sharply unequal distribution can create scarcity in the presence of wealth. This is the part that Keynes didn’t answer for us. In Keynes’ system, we can clearly see that he realize that involuntary employment attributes to weak effective demand, or more precisely under-consumption, but he failed to tell why in capitalism there is a demand problem. This deeper problem is overlooked because the potential for government to greatly counter economic downturns is one that is much exaggerated by Keynes.

Unfortunately, the current economic downturn in the United States, at least I believe, is caused by both of the reasons. The distribution problem looks much harder

for us to deal with because it comes from the capitalist production structure and even the ideology of capitalism.

According to Marx, the primary goal of capitalism is to assure a certain long-run rate of accumulation. That is to say, in capitalism, profit is the only reason for production. Wages, which to a large extent determine the happiness of the working-class, is not as important and thus should be adjusted freely so as to make the rate of capital accumulation possible. The real wage is able to rise with the development of capitalism but it can never rise proportionately to the increase in the productivity of labor. Moreover, in order to weaken the bargaining position of the working class for the sake of ensuring their product share, capitalists keep introducing labor-saving innovations to displace labor by capital, even at the cost of efficiency loss. This production format and distribution pattern result in a huge income discrepancy between the working-class and the capitalist-class.

The distribution problem will not bother the neoclassical system because according to the idea of infinite wants and the utility theory income discrepancy as a result of capital accumulation has little effect on consumption demand. However, as we have seen in Levine's argument, finite needs will set the limit on consumption demand. In addition, Keynes claims that the propensity to consume for wealthy people is much lower than that of poor ones, which further weaken the aggregate consumption demand in capitalism. The answer to this phenomenon is once again found within Levine's framework. Levine believes that although needs are generally finite and

satiabile, there is an exception – the need for more wealth. This need is in fact the primary one of capitalists according to the ideology of capitalism. Consequently, the capitalist-class, who owns the majority of the national wealth, is much more interested in investment than consumption since investment is the only way that allows their capitals to grow. However, without enough consumption demand, investment can never be sustained. In addition, weak consumption demand will generate an efficiency problem called excess capacity. The existence of excess capacity at undesired levels is actually a direct result of a weak aggregate consumption demand with desperate aggregate demand of investment caused by a big income discrepancy.

However, the pursuit of wealth based on private property in capitalism has been historically proven as an influential stimulation mechanism for transformational growth. Steady growth will finally end in stagnation but transformational growth is able to match up with the development of our personality thus constantly stimulating consumption demand. So we become trapped in a dilemma, a just distribution pattern or a superior stimulation mechanism. The situation of under-consumption due to the distribution problem is the inherent weakness of capitalism which cannot be solved within its structure. So we have to rely on how much transformational growth can drag us out from this big hole. My final conclusion is a little disappointing because I don't foresee that the involuntary unemployment and economic fluctuations can be permanently cured in capitalism. Maybe a more advanced social structure is required for a better economy.

## NOTES

[1] Pigou's theory of employment was the only neoclassical work on unemployment before Keynes but that since then there has been work within the neoclassical theory on unemployment such as the search theory associated with Edmund Phelps and the misperceptions under rational expectations of Robert Lucas. Nevertheless, the core neoclassical idea that "unemployment should be all voluntary" is maintained in both of these models. Phelps, Edmund S. (1968). "Money-Wage Dynamics and Labor Market Equilibrium". *Journal of Political Economy* **76** (S4): 678–711; Lucas, R.E., Jr. (1972), "Expectations and the Neutrality of Money," *Journal of Economic Theory*, **4**, 103–124.

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[4] Say and Mill are both classical economists, but their classical conclusion about employment is still valid within neoclassical system since both classical and neoclassical schools assume that supply can be completely absorbed by demand though through different mechanisms. As a result, full employment level can be automatically achieved by free market.

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- [18] The neoclassical idea of infinite wants does not allow Marshall's demand curve to cut the x-axis. Marshall in his *Principles of Economics* intentionally avoid discussing the situation of negative utility probably because he himself is little confused with this idea. Obviously, his "famous scissor" works much better with the idea of infinite wants because otherwise the demand curve might not be able to cut the supply curve if part of it lies below x-axis, thus no price can be determined in his model. His confusion can be clearly seen when he claims that commodities have alternative uses. The reason is that with alternative uses his demand curve is more likely to keep above x-axis. Marshall, A. (2010). *Principles of Economics: Abridged Edition* (p. 73). New York: Cosimo. Wilensky, R. (1984). The Theory of Demand in Marshall and Hicks. *Social Concept*, 6-13.
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