

# **Keynes Meets Adam Smith: the Different Behaviors of Manufacturers under the Two Theories When Supply Exceeds Demand from the Perspective of 4p and 4c**

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**Abstract:** Adam Smith and Keynes, two economists in human history, divide economics into macroeconomics and microeconomics. They put forward their own theories to deal with different economic situations in different economic periods, and make outstanding contributions to the growth of the world economy at that time. However, the two men put forward different views and give different explanations for the merchants' behavior when supply exceeds demand. By means of comparison, this work established a manufacturer model to compare the process and results under the two business modes, and finally revealed the essential relationship between the two laws. In addition, economic benefit analysis under different modes was used to explore the causes of different economic policies. Finally, by using the relevant knowledge of advertising and marketing 4P and 4C theory, the question was observed and analyzed combined with the economic situation at that time, and the question was answered based on the difference between the two theories.

## **1. Introduction**

Adam Smith thinks that the market is an invisible hand, regulating the balance between market supply and demand. In addition, what we have set up is some behavior that happens when supply exceeds demand, when the producer has an excess of output and the quantity of products far exceeds the market demand.

## **2. Adam Smith's Point**

As the founder of classical economics, Adam Smith wrote in the *Wealth of Nations*: “In general, it is true that he neither intends to promote the public interest nor knows to what extent he will promote it. All he considered is his own gains. However, as on many other occasions, he is guided by the invisible hand to achieve a purpose that he doesn't intend to achieve on this occasion. It's not because things are not meant to be harmful to society. He pursues his own interests, but often makes him more effective in promoting the interests of society than he really wants to save”.

Through the price mechanism, Smith freely circulates market resources between families and manufacturers, reflects the demand degree of resources in different fields through price fluctuation, thus achieving the just maximum utilization of resources. He believes that when supply exceeds demand, it is the market that emits the signal of “resource surplus”. In order to compete for demand, manufacturers will reduce prices and sell products.

## **3. Keynes's Point**

In his *General Introduction to Employment, Interest and Currency*, Keynes pointed out that: “the premise of classical school is only applicable to one special case, not to the general situation”. He believes that the so-called equilibrium in traditional economics is the full employment equilibrium based on the wrong theory that supply itself creates demand.

When supply of goods exceeds demand and there is surplus, Keynes thought that the output should be adjusted and the production forecast for the next year should be lowered to balance supply and demand.

#### 4. Perspectives for Two Assumption - Based on Long-Term Supply and Demand

Let's try to make a hypothesis:

First, we have a very simple community with one manufacturer and ten consumers, and the manufacturer produces ten pairs of shoes every year.

Second, consumers consume one pair of shoes a year, and ten consumers consume ten pairs of shoes a year.

Third, 13 pairs of shoes were produced due to oversupply in the first year.

Fourth,  $D_t$  represents the demand of the first year, and  $D_t + 1$  represents the demand of the second year. Similarly, supply is represented by  $S_t$ ,  $S_t + 1$ . Where  $t$  represents the current period and  $t + 1$  represents the next period.  $D$  represents demand and  $S$  represents supply.

Fifth, let's observe the behavior of manufacturers for two years

##### 4.1 What Happens Next According to Smith's Theory

What will happen is that the manufacturer will sell by means of price reduction. Let's say that the manufacturer sells at a reduced price, and then three people buy two pairs of shoes due to the price is cheap, which happens to sell 13 pairs of shoes. So what will happen next year?

Next year, due to three people bought two pairs of shoes last year, they will not buy shoes this year, and the other seven people will buy a pair of shoes according to the normal situation, how many shoes will the enterprise produce? The answer, of course, is seven pairs of shoes.

Therefore, we can see that when the supply exceeds the demand, the manufacturer will promote the sales of shoes, so that the essence of selling goods is to change the potential demand or the future demand into the actual demand. However, the total demand is fixed, just as the total demand in this region is 20 pairs of shoes in two years, so the manufacturers can solve the problem of stock accumulation by reducing the price and transferring the consumers' demand for shoes from next year to this year. However, in the second year, due to three people have bought shoes of this year in the second year, they will not buy shoes again.

$$D_{t+1} = 20 - (10 + 3) = 7$$

Further forward, we can see that the situation faced by the merchants after dumping through price reduction is that they need to adjust the output in the second year to make up for the demand.

##### 4.2 What Happens Next According to Keynes's Thought

Let's repeat the previous situation again. In a region, there are ten people in total, and they need  $10 * 1 = 10$  pairs of shoes every year. However, the manufacturer has produced 13 pairs of shoes this year, so the typical situation is that the supply exceeds the demand. According to Keynes's thought, what the manufacturers do is not to reduce the price, but to do nothing. This year, they will sell 10 pairs of shoes, and the remaining 3 pairs of shoes will be used as inventory, which will be sold in the

next year. Or suppose that the total demand for two years is  $2 * 10 = 20$  pairs of shoes, then the demand for next year is  $20 - (10 + 0) = 10$  pairs of shoes. What the enterprise needs to do is to achieve the balance between supply and demand by reducing production next year, thus solving the remaining inventory problems of this year. Then the manufacturer will produce  $10 - 3 = 7$  pairs of shoes according to the situation of this year.

$$D_t = 10; S_t = 10$$

$$D_{t+1} = 10; S_{t+1} = 10$$

##### 4.3 Both Have the Same Long-Term Needs

From this, we can clearly see that both Smith's theory and Keynes' theory result is the same (i.e., enterprises balance supply and demand by changing the way of supply in the second year, thus solving the problem of inventory). The difference is that the former is through reducing the price, while the latter is through inaction. However, the two approaches reach the same level, and finally

achieve the balance between supply and demand by adjusting production. The difference is that Smith satisfies the balance between supply and demand by changing potential demand or future demand into real demand. In Smith's theory, no matter in the first year or the second year, there is no inventory, which satisfies the balance between supply and demand. However, the total demand for two years is a constant condition of 20 pairs. Keynes's theory also follows this premise, but the difference is that the supply-demand gap under the guidance of Keynes's theory is changing. Under Smith's theory, the market is balanced, so he may say that the market is an invisible hand, which will adjust the balance between supply and demand through economic laws. In Keynes's theory, just like the economic crisis, there was a situation of supply exceeding demand in the first year. Until the beginning of the second year, the market did appear unbalanced in the case of inaction, but this phenomenon was lifted at the end of the second year (This state of failure does exist. The author believes that it is not the market that has failed, but the people's behavior has changed. Changes in people's economic environment, commodity choices, material life, economic income, and production methods have affected people's behaviors, so people's economic activities have also changed. People no longer engage in economic activities by reducing prices, so naturally this so-called market is also 'failed'). In Keynes's theory, merchant does not regulate the future demand and potential demand, so the market demand in the first year is 10 pairs, and the market demand in the second year is 10 pairs.

## 5. Comparison of Economic Benefits under the Two Models

Let's analyze the economic benefits of Smith. For example, the income of a pair of shoes is 10 yuan. If we carry out economic activities according to Keynes's theory, the income of the manufacturers in the first year will be  $10 * 10 = 100$  yuan, and the income of the manufacturers in the second year will be  $10 * 10 = 100$  yuan. However, the second year's income will be  $7 * 10 = 70$  yuan according to Smith's theory. In the first year, due to the merchants reduce the price of shoes, the income should be less than  $13 * 10 = 130$  yuan, so the manufacturer's income will be less than  $170 + 30 = 200$  yuan. So the manufacturer's income in Smith's theory is less than that in Keynes's theory.

## 6. Discussion

Whether Smith or Keynes, we can see that their theories all lead to the same thing, and finally they are all on the way to adjust the production of commodities in the second year. From the whole process, it is the same. In the first year, 13 pairs of shoes were produced, and in the second year, 7 pairs of shoes were produced. Finally, we took two years as a cycle. In two years, 20 pairs of shoes were produced in two years, and 20 pairs were sold. In the General Theory, Keynes believed that the interest subjects in any economic system should not only focus on the present but also on the future when they consider the economic problems involving their own interests. The issues involved are the adjustment of current and future demand.

At the same time, both theories have a certain degree of correctness. The difference is that the two are describing different economic phenomena: one is price reduction and the other is inaction. These economic activities are different due to the times in which they live are different, and the economic phenomena in the two times of life are naturally slightly different, but the economic laws inherent in the two methods are actually the same (i.e., the problem needs to be solved by adjusting the balance between supply and demand, and finally by changing the production volume in the same way). Due to the purpose of an enterprise is to make profits, which is to meet the supply and demand balance, this is the purpose of an enterprise, and it is also the essence of things. The difference described by Smith and Keynes is the different ways of expression in different times under the essence of this economic law.

However, there is a problem worth pondering. Both Smith's theory and Keynes's theory can achieve the same result, but obviously, in Smith's theory, the income of businessmen is relatively small. And in Keynes's theory, the income of businessmen is relatively high? Then why did the

manufacturers in Smith's time take the action of thankless?

## **7. The Difference between the 4p and 4c Era Determines the Market Competition**

### **7.1 P Theory and 4c Theory**

The 4P and 4C theory was put forward by Professor McKinsey and Professor Lautburn in the 20th century. As a communication marketing theory, it describes two different economic states well. 4P theory emphasizes that enterprises produce more homogeneous products when the productivity level is relatively low. 4C theory shows that when the productivity level is improved, the basic needs of consumers are met, and products begin to differentiate. Also, brand effect begins to produce, and consumers will be affected by the effect.

### **7.2 P Era**

In the era of underdeveloped materials, people try to solve the problem of food and clothing. If the merchants buy too much goods, what will they do? Smith used books to record the state at that time: "in every country, the quantity of all kinds of goods that human industry can buy or produce will be adjusted according to the effective demand. All laws and regulations of mercantilism will inevitably disorder the natural and most favorable capital distribution more or less".

The market competition is very fierce. The purchasing power of clothes is always a scarce resource for businesses, due to more businesses want to make profits in a fixed cake. At that time, the productivity level was relatively low, most of the goods were mass production, and there was no significant difference between the similar goods owned by the market. Therefore, the price of the goods would become a very important purchasing factor at this time, so businesses expanded the product market through this way. The consumption characteristics of this era are called 4P era.

### **7.3 C Era**

With the improvement of productivity level, a large number of products have been improved, and people's basic needs have been met. In the original homogeneous products, people began to have personalized needs. At this time, the competition between enterprises has changed from the product quality price competition at the beginning to the competition to meet the consumers' needs, thus obtaining consumers and market share. So products that fit the individual characteristics begin to come out.

For example, a pair of shoes from NIKE will come out in different colors, and Li Ning will produce basketball shoes with high soles for basketball players. This market has begun to be subdivided, and according to the layering of people's personality, it is divided into various levels that meet the characteristics of consumers. Enterprises have begun to carry out specialized and targeted production division of labor for consumers with different characteristics at different levels of the same industry. Enterprise has a fixed consumer population, has its own corporate image and brand image, and has its own design philosophy features. At the same time, consumers have gradually developed a sense of trust in products that meet their own personality. Enterprises and consumers have formed a relationship of cooperation and trust through this bridge between personality and hobby. So in today's society, it is not difficult to find many such examples, such as Xiaomi mobile phone fans, NIKE fans in the sports field, and the most common Apple fans.

From the perspective of the whole market, enterprises attract and consolidate their established consumers through personalized services, which also creates a fixed consumption income for enterprises. At the same time, when the target consumer group is determined, the consumers with other characteristics are occupied by other enterprises, and it is difficult for enterprises to attract the consumers outside the established group. Therefore, the operation of enterprises becomes more stable in this economic environment, and the market competition changes from the competition between the same goods to the competition between different enterprises. The production of enterprises is relatively stable. So for them, there seems to be only one enterprise among their established consumers, which goes back to our assumption at the beginning, so enterprises start to

operate and produce by the means described in Keynes's theory. The enterprise sales model in this era is called 4C economic model.

## 8. Conclusion

Smith's era belongs to the shortage of supply. In Keynes's era, with the progress of the era, the productivity has changed. The market can meet the basic needs of consumers while meeting the personalized needs of customers. The satisfaction and excess of supply make the economic situation in Keynes's era change dramatically - from the shortage of supply to the satisfaction of supply and demand to the shortage and excess of supply. In the new economic situation, Keynes's theory improved the new economic theory, and influenced the aggregate demand from the macro perspective.

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