
Monopoly price limit enterprises go from where

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Abstract

Monopolies are divided into two, one with technical advantages, form a monopoly on the industry, such as the United States Microsoft Corporation; or by State-controlled monopolies, such as tobacco, electric power industry of our country. Natural monopolies because of economies of scale, external effects and the barriers to entry, it is necessary to his monopoly, such as running water, electricity, public transport and so on. Monopoly inevitable loss would create a monopoly and consumers, but in China, the part there is a monopoly monopoly price phenomenon. Static game with incomplete information, this article focuses on, and the Harsanyi transformation and Bayesian Nash equilibrium to describe the reasons for this phenomenon. With the opening of national markets, monopolies existing scale, technology, market advantages and capital advantages conducive to the benefit level is not so prominent, in a certain sense, monopolistic competition even more brutal. In this competitive pressure, not just the monopoly price enterprises, all monopolies should be continued technology innovation activities, this paper to reflect on the monopoly price enterprise's technical innovation.

Keywords

Monopoly prices; Technology innovation; Static game with incomplete information.

1. Introduction

The scholars and economists generally believe that a completely competitive market in order to fully stimulate the vitality of the market, let the market give full play to the "invisible hand" of the role of regulating the relationship between supply and demand, improve resource utilization, reduce waste. Oligopoly refers to the production and sale of products by a small number of enterprises that control the whole market, and the prices of the whole market are controlled by monopolies. In order to pursue the maximum profits, each enterprise in a certain degree can according to their own production costs and market demand from the approved price, the premise can fully grasp competitor information in part or the master is down for the game, which approved the price. In our country, oligopoly or monopoly exists in some industries. Services provided by public utilities are generally oligopoly. This kind of relationship is important to the national economy and the people's livelihood, and it can not be regulated purely by the market. It operates purely in accordance with the market rules. In general, there is an oligopoly market and monopoly market entry barriers, monopoly pricing will be much higher than the cost price, even in the market price is higher than other industries. But in our real life, some monopoly industries, such as railway transportation, his price is relatively low, according to the special case to discuss the existence of monopoly enterprises and the monopoly price limit causes the enterprise technology innovation to seek development.

With the evolution of traditional monopoly into technical monopoly, monopoly is not the form that classical economists have objected to. Xiong, Pete and others believe that technological monopoly is beneficial to technological progress and is conducive to the development of enterprises. Technological innovation is the decisive factor that influences the optimization, upgrading and

economic development of industrial structure. Taylor believes that monopoly is to obtain higher profits through patents, there is a greater incentive for the monopoly of innovation. Kaman believes that the higher the degree of monopoly, the longer the technological innovation. Freedman pointed out that monopoly and competition are difficult to distinguish. In his later years, Marshall encouraged Britain to study the United States, establish a monopoly alliance, and improve Britain's competitiveness in the world. In his book "competition in the dynamic process", Clark said, "efficiency monopoly" formed by technological innovation promotes technological innovation in enterprises. John Dunning and Gindele Berg believe that the biggest advantage of multinational corporations is technological monopoly. The founder of the theory of monopoly advantage regards the technological superiority of multinational companies as the most important monopoly advantage. Thus, technological monopoly competitiveness is the most important factor for an enterprise, as well as an enterprise based industry and the state to maintain its division of labor status in the global industrial chain. For monopoly price limiting enterprises, technical monopoly is undoubtedly a new direction.

2. Game model description

2.1 Static game of incomplete information

The static game of incomplete information refers to the fact that at least one of the two parties in the game does not know the characteristics of the other, that is, they do not know the true type of a participant, but they know the probability of each type of occurrence. For example, in China, the market can be roughly divided into the competitive market, complete monopoly market, imperfect competition market and the monopoly market of four, when a new entrants must choose whether to enter the market, he must consider the cost of entry and incumbent for his to make a choice, and in his reign the choice of income. When entering to choose to enter the market, the incumbent also has two choices: acquiescence entrant into the market or fight, will enter them out of the market, of course, pay the two choice of the cost is not the same, in which is the market and enter a static game of incomplete information. The incumbent and entrant in the market, there are two such cases: high cost and low cost in the market, the two cost of the market environment under the premise of the entry and the incumbent choice is not the same. In this case, the entrant does not know whether the market is a high cost or low cost market.

Premise of high cost market. To choose to enter the high cost of the market, if the incumbent acquiesced in their entry into the market, then the entry and the acquiescence of the incumbent won the 45 and 55 of revenue respectively; and if the incumbent choose to fight, is entering lost 15 of the cost of losses and gains, the incumbent and the consumption cost. In general no gain no loss. The incumbent at this time, as a rational economic man, will certainly choose to acquiesce in the entry of the entrant. When the entrant chooses not to enter the market, the incumbent does not have the option to acquiesce in his entry or struggle, and he will still receive 350 of his earnings. Therefore, in the premise of high cost market environment, if the entrant enters the market, the incumbent will generally take the attitude of acquiescence, when the incumbent will know that the entrant under the premise will choose to enter the market.

Premise of low cost market. To choose to enter the market at low cost, the incumbent if its acquiescence to enter the market, then the entry and the acquiescence of the incumbent won the 35 and 100 of revenue respectively; and if the incumbent choose to fight, is entering lost 15 of the cost of losses, while the incumbent earning 145. The incumbent at this time, as a rational economic man, will certainly choose to fight. When the entrant chooses not to enter the market, the incumbent does not have the option of acquiescence or struggle, and he will still receive 450 of his earnings. Therefore, in the premise of low-cost market, if the entrant enters the market, the incumbent will fight to the end, when the incumbent will fight to the end, the entrant will choose not to enter the market.

2.2 The Harsanyi Transformation

Under the above assumptions, the market has entered into the market is the high cost or low cost market, but in real life, the market is the high cost or low cost market market, only the incumbent and entrant is clear, do not understand, entrants can judge the high cost or low cost market according to the market all kinds of behavior of the incumbent. So this is a "perfect information static game, then do a Harsanyi transformation, the introduction of a virtual participant -- nature, the conversion is not safety information game" to "complete but imperfect information game".

2.3 Bias Nash equilibrium

In a given participant type belief situation, each participant's expected utility is maximized, because the game used type of Bayesian method on the opponent that in the selection of senior policy function, so it is called "Bias Nash equilibrium". We can obtain a priori equilibrium when we are static.

In this case, the expected return of the entrant into the market is $40P + (-10) * (1-P)$, and the expected gain from not entering the market is 0. As a "rational economic man", the entrant chooses to enter the market when the returns to the market outweigh the benefits of non entry. That is, the prior probability $P > 0.2$, the entrant will choose to enter the market; on the other hand, when $P < 0.2$, the entrant chooses not to enter the market.

2.4 Monopoly price fixing

As everyone knows, the monopoly industries prices are slightly higher, with a relatively large profit margins, but in practice, there are a lot of monopoly is not as expected to set a very high commodity prices, but lower prices in the long-term sales of developed countries such as the private railway, aviation, marine terminal the prices are far lower than the determined price monopoly pricing method.

We analyze the model according to the model described above. When considering whether to enter into a market, the cost is a key factor in the high cost, when the market situation, choose to enter the market to enter into, the incumbent will choose to allow the acquiescence of entrants, namely in the high cost of the market, entrants will choose to enter the market; when in the low cost market, to choose to enter the market, the incumbent will choose to fight in the low cost situation, one that enters the market to pay more than the price, and no income, the entrants will choose not to enter the market. In general, the monopoly price model is a combination of game model and signaling model, entrants do not know to enter the market is the high cost or low cost market market, but as long as to enter a signal transmission to enter the market for low-cost market, enter the choice is often not to enter the market.

This is why the monopoly manufacturers will voluntarily limit the situation, is to give the incumbent monopoly or oligopoly market price is far lower than the monopoly pricing, to transmit a signal through this, to potential entrants in the market for a low cost market illusion. In order to avoid the losses caused by the choice of the incumbent, the entrant will choose not to enter the market, while the incumbent in the market will retain the monopoly status and the monopoly profits of small profits and quick turnover.

3. Some suggestions on monopoly price fixing Enterprises

3.1 Appropriate lowering of commodity prices

Due to lower commodity prices is not only to allow potential entrants prohibitive, will let the existing weak incumbent gradually withdraw from the market, keep the monopoly enterprises in the market in a monopoly position, at the same time to help consumers, enhance consumer satisfaction. To a certain extent, the reduction of commodity prices can also crack down on monopoly middlemen, increase the possibility of middlemen withdrawing from the market and improve the profitability of the industry.

3.2 Regulate the market

With the power of government, vicious competition, market regulation malicious price monopoly phenomenon, breaking the possible intermediary buyer monopoly phenomenon in the market, as far

as possible to form an orderly and healthy development of the market, to maintain the sustainable development of the industry gradually.

3.3 Merger and reorganization

Through mergers and acquisitions, we should appropriately reduce the number of monopoly firms, effectively integrate resources, technologies and markets, increase monopoly, and increase monopoly power. Here should pay attention to, the appropriate reduction, not a big one. First, the government and the market situation, it is impossible to not allow a single large case; second, the monopolistic concentration, can reduce the sense of crisis, not the driving force of progress, but not conducive to the sustainable development of enterprises.

3.4 Technological innovation

Wang Qing Yu Donghua of the Shandong University and studied the relationship between administrative monopoly and regional independent innovation ability, they found that the administrative monopoly hinders the formation and development of regional independent innovation ability, and there are regional differences in effects of administrative monopoly on regional independent innovation ability. Ceng Fanhua and Zhao Zhenyu pointed out that an enterprise or industry to obtain monopoly profits, the key is to maintain and renovate his technology monopoly competitiveness, such as western developed countries will be based on the advantages of technology monopoly competitiveness of the transnational corporations to obtain monopoly profits, resulting in all developing countries in China, and technical barriers in the rising channel of the industry on the higher. From this we can see that technological innovation is necessary for monopoly price limiting enterprises and even the entire monopoly industries, and all of them are the key factors for development.

4. Summary

In recent years, the implementation of the open market in China, China's monopoly market monopoly market to competition gradually, not by force of the state to ensure the implementation of the competitive monopoly market, the market incumbents if you want to ensure their monopoly position and monopoly profits for a long time, one of the feasible scheme is a reference to "monopoly price model" self control of the industry's pricing, the entrants mistakenly believe that the industry market for low-cost market, so as to choose to enter the market competition. But with the development of economy, the cost gradually increased, "monopoly price" is not a permanent solution. At this point, we should pay attention to the innovation of the industry, the cost reduction caused by technological innovation and technical monopoly, and the upgrading of quality, etc., are the key to the long-term development of the monopoly industry.

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