

# Research on Monopoly's Variable Effect on Digital Market in China—Take Xiaomi as an Example

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## ABSTRACT

This article demonstrates how monopolies affect the digital market in China. Every country in the world may experience various monopolies and make regulations since they may ultimately result in adverse effects. However, competition and monopoly between different markets may vary and have completely different attributes. It is incorrect to consider that monopoly would cause absolute disadvantages to the market without research and relate the damaging effect to the economics model. Under such fast-paced development of digital products and markets, monopoly affects many people in the United States and China. Based on the economic theory, should they be considered negative factors in the competitive market, or are they beneficial for market performance conversely? The main discussion of this article will rely on the comparison and dispute through the methodology and actual circumstances of well-known digital monopoly companies, including Apple in the United States and Xiaomi in China. Based on the current economics models and research on monopoly and also the collection of actual data in the digital market, this article will introduce the different monopoly phenomena. It will lead the market into a positive trend by self-adjusting. Although monopoly is often considered a harmful factor, results show the digital market is still competitive and gets stimulated without additional regulation and is beneficial for the whole market's economy and customers.

**Keywords:** Monopoly, Digital market, Apple company, Xiaomi

## 1. INTRODUCTION

If there are competitions in the market, there are producers and customers, and there will likely be a monopoly. All nations over the world will somehow encounter the phenomenon of monopoly, which is unavoidable. As Joan Robinson mentioned in the Article The Economics of Imperfect Competition, ‘It is more proper to set out the analysis of monopoly, treating perfect competition as a special case.’[1]. A monopoly is formed when a particular producer offers merchandise that is so attractive to the customers and could exclude other competitors from making efficient substitutions. The whole world is developing extremely fast, accompanied by technological advancement, so does the market. People are no longer drive 25 minutes to the mall for shopping; instead, using delivery applications requires few clicks to finish the purchase. People no longer use keypad phones that are voice only with the bad signal; instead, accessing facetime with a high-speed wire network. It is no doubt how technology improvement brings so much convenience to people’s

lives but also formed more prominent in economics, specifically, the market competition. Different companies own various digital technologies; they claimed ownerships, rights, patents, or even monopolies. To define whether monopolies affect the market negatively or positively; if the domination results in the extinction of new starting-up companies; or if the existence of monopoly helps boost the development of small companies and be beneficial to the whole digital community. It is unavoidable to referring to the previous study. Based on the traditional economic model, the answer will be no. Since previous research has approved that the behavior of monopoly will result in ineffectiveness in the market from the long-run perspective. However, does the market remain unchanged through the decades, or is monopoly solved or even benefits the digital market these days? Thus, the model may not illustrate this circumstance well, and the market may or will solve the monopoly issue by itself nowadays. The purpose of this paper is to make connections between the real digital markets’ cases with the literature review of the economic model and figure out the impact of monopoly soon brings.

## 2. THEORETICAL BASIS

### 2.1. Monopoly in Economic Theory

First, it is essential to understand the monopoly that exists in the markets and what kind of absence it had in the theoretical background. According to what A.P Lerner defined in the article The Concept of Monopoly and the measurement of the Monopoly Power, ‘Monopoly is the exclusive right that a person or company to sell the specific merchandise by arbitrarily set the price and let consumers decide how much to purchase or they will decide the quantity to produce on the market’[2]. However, monopoly is not simple as the definition gives. The phenomenon of monopoly beyond the theory may hurt the market or negatively affect the pioneers’ research. Based on the basic economic theory, monopoly will decrease the consumer surplus since the part of the original consumer surplus will be transferred to the producer, which will ultimately generate a deadweight loss, erosion of consumer sovereignty, and market failure.

### 2.2. Attributes of Monopolies in the Market

There are various types of monopoly from all aspects of our daily lives—for example, railways, Oil, Steel companies, luxury brands, internet suppliers, smartphones. Several monopolies like these appeared on the market, but they have completely different attributes. For example, the government would not intentionally regulate the railways, oil monopolies since they are necessities of nations that benefit country development. On the contrary, the government would regulate overpriced commodities because sometimes they negatively affect the fair market and induce consumers. However, the government’s attitude toward regulating the digital markets, including phones, the internet, remains ambiguous. Many previous studies do not provide an exact answer on how digital market monopoly relates to the same attribute as traditional commodities or how they could perfectly fit into the market today with no adverse consequences. All three kinds of monopoly, which have different attributes, appeared in the United States and China, or even worldwide. It is necessary to discover how monopolies take place in the digital market.

### 2.3. Monopoly in Digital Markets

When thinking about the monopoly in the digital markets, smartphones will act as a perfect commodity to discuss, and it is unavoidable to mention Apple. It functioned as the pioneer of the digital era, of course, also the monopolize. ‘Apple was founded in 1976, introduced its first popular product, iPhone3, in 2008, and nobody could imagine how successful it would be and how Apple products dominate the market for

decades’[3]. To dig more deeply into it, what makes Apple a monopoly? Touch screen, convenience, novelty. Multiple traits of Apple products make it successful and become the monopoly on deciding the high price because there are absolutely no competitors in the market that could provide substitutional or homogeneous products. In addition, comprehending how Apple solidifies its monopolize during the decades is also essential. Technologies are developing at an incredible pace in this information era, and Apple could not avoid other developers from worldwide from offering new products. Instead, they make their products as a bundle and design certain constraints when consumers want to use their products. First, people may simulate the appearance of the Apple product, but they cannot copy the internal operating system. Apple sells its products in this kind of bundle, allowing consumers to use the non-shareable IOS operating system. On the other hand, Apple set limitations on their products when they will offer the new version. According to the article Apple’s Watch Is Smarter, but My Casio Keeps Getting the Job Done, N.Y. Times (Aug. 23, 2019), written by Jeff Sommer, mentioned that ‘Apple introduces new products as a way to justify no longer providing service and support for the previous version, to make constraints and somehow manipulate consumers’ purchasing behaviors’[4]. Although the fact seems cruel and the Apple monopoly is harmful to the market, things gradually changed in this digital era.

## 3. ANALYSIS

It no denies that Apple formed the digital monopoly over a long period. However, data and results show that their market shares gradually decrease as more new smartphone companies enter the market. The most classic and phenomenal example of such companies is Xiaomi, which went from limited to national business in China. The comparison between Apple and Xiaomi indeed helps introduce how small companies use their marketing strategies in the digital market to become competitive and avoid being annexed, which somehow counter-balanced the monopoly and adjusted the digital market in a fair trend.

### 3.1. Apple’s Loss of Utter Dominance in China

Apple used to be the number one donor of the smartphone factory, especially in China, a nation filled with massive populations. From people who could only use keypad phones to first discover the touch-screen technique in 2008. Apple successfully opened the market in China and quickly occupied the entire phone market. However, such monopoly behavior is weakened over time. According to the following information provided by the IDC China Quarterly Mobile Phone Tracker, it is clearly shown that ‘Apple does not conquer the market on its own nowadays. Instead, Apple

must share the market with many other smartphone producers, including Huawei, OPPO, Vivo, Xiaomi [5]. Does this mean Apple is not considered competitive in the market? No. It may suggest the market somehow adjusts itself and boost more competitors join, balancing

the problem of damaging monopoly. It is noticeable that the market shares of apple are floating, and domestic brands like Xiaomi rise sharply comparing to the others.

COMPANY	Shipments in the first quarter of 2018 (million)	Market share in the first quarter of 2018	Market share in the fourth quarter of 2017	Market share in the first quarter of 2017	Year-on-year growth
HUAWEI	21.2	24.2%	21.3%	20.0%	1.9%
OPPO	16.5	18.9%	17.5%	18.2%	-12.6%
VIVO	14.2	16.3%	16.5%	14.2%	-4.0%
XIAOMI	13.2	15.1%	13.9%	9.0%	41.8%
APPLE	9.8	11.3%	12.9%	9.2%	2.5%
OTHERS	12.6	14.2%	18.0%	29.4%	-59.3%
TOTAL	87.5	100.0%	100.0%	100.0%	-16.0%

**Figure 1.** Market Share Data from IDC China

The information proves that the tremendous year-on-year growth of Xiaomi set off a dominant trend in the Chinese digital market, which rapidly conquered a significant portion through digital competition and pushed other monopolized companies like Apple towards the edge. The appearance of Xiaomi forced monopolies like Apple to vacate spaces and concessions to maintain profit and survive in China. In addition, the digital market no longer allows complete domination like before. People may worry about Xiaomi becoming the next monopoly. However, the data from Huawei shows it will not be the case. In the post-Xiaomi era, Huawei is the second biggest monopoly in the Chinese market besides Apple, but they are still losing market share in recent years. This is not an accident; it is the result of these local Chinese companies implementing unique strategies and marketing plans to compete with existing market monopolies like Xiaomi. Domestic digital companies prove that how they generating products, developing and competing in the digital market with efforts and monopoly could not restrict their growth and ultimately share a piece in the digital production market. Thus, rather than the monopolized behavior in the traditional market, the digital market can adjust the market itself, which reveals the truth that if a producer blindly raises the price annually without sufficient innovation to bring to the customers, the ultimate result will be marginalization and loss of market share in the long run.

### 3.2. The Growth of Xiaomi

From a small company to a leading enterprise, it is essential to understand how Xiaomi survives in this digital era with a monopoly and prove that small businesses are affected by the vast monopoly with a positive trend instead of market failure. When speaking about Xiaomi, most will consider it cheap, decent, and efficient. The differences between brands like Xiaomi and iPhone are like everyday goods and luxury goods,

especially in China. There is no doubt that smartphones are part of life nowadays. They are considered necessities. Xiaomi offers a price which most people in the country can afford. However, Apple aimed at consumers' advanced and fancy needs. This is the foundation of small enterprises like Xiaomi to start their business, which they grasp the essence of the digital market and compete with Monopolize companies step by step. Xiaomi implemented the business strategy of Fan-centric based on the article Fan-Centric social media: The Xiaomi phenomenon in China. Xiaomi created a powerful fan-based business model to attract and accumulate fans, which leads to the company's success. As the article mentioned: 'Many companies have started employing social media managers to build their respective fan bases and have even set up separate fan departments and commissioned professional marketing companies to handle fans' issues. This implies that fans are becoming increasingly important and will play a key role in social networking sites' [6]. Indeed, the easiest and most convenient way to receive digital information is through the internet, and Xiaomi did an excellent job of it. The whole company aims to promote their products online, which every customer can have the opportunity to talk with the managers or even directly communicate with the Chief Executive Officer. Since other companies in the digital market could not perform the same, Xiaomi gained more publicity and more product recognition year by year. Without purchasing too many advertisements but relying on low-cost social media posts and responses, Xiaomi rapidly acquired a decent number of fans who stick to the brands and love to purchase any products the company offers. Under such circumstances, Xiaomi developed very well in the digital market and kept innovating new products for the new market since they were aware of the importance of satisfying customers' needs and clinging to a fan-centric social media strategy. Xiaomi starts launching other electronic products with

the same theme of cheap, affordable, and pragmatic, such as hairdryers and vacuum cleaners. The whole digital market witnessed the growth of Xiaomi from the bottom up and brought many entrepreneurial concepts to China. It cannot be denied that Xiaomi constructed their novel sales idea. However, the monopoly that existed in the market for a long time also served as a bridge for Xiaomi to succeed.

#### 4. CONCLUSION

The basic economic theory says that monopolies are likely to have a negative impact on the market. The research discovered that certain types of monopolies in digital markets may be beneficial or positively influence the market. Monopolize more tends to stimulate market development and encourage small enterprises to take part. The reason for this result is because the digital market has different attributes from the standard market. The quick development speed will push the producers to innovate new techniques and products to satisfy consumers more constantly. The monopoly power in this field has been significantly reduced since various competitions are ongoing every year, and plenty of opportunities are also given to small enterprises. The market is evolving with technology and adjusting to the effect of a monopoly by itself. Small business companies will not stop when they accumulate a decent customer base but transform into large companies. They tend to keep growing and seek opportunities, and consumers need to make more profit. However, it is not a bad thing. The more competition is generated in the digital market, the more choices people can make through comparing, the more conveniences arise from technology innovation in daily life, the fairer the market will be. In addition, companies must keep developing and generating fresh ideas since they will all be assessed over time. A monopoly cannot last long in such a case. Raising prices without innovation in the digital world will ultimately lead to extermination. Although a monopoly enables the market to develop in a great trend, it could still not be perfect competition. Further studies are still required to determine whether the positive effect is a short-term phenomenon or can bring more advantages in the long run. Should the monopoly in the digital market be considered a unique case in the economy since it is so contrary to the original monopoly model? How to keep those benefits with consumers' sovereignty without striking producers' innovative development?

Those questions need real-time data and experiments in the future decade to compare and conclude. The key to further research may mainly relate to small enterprise survival methods and large companies' adjustments when they encounter more and more competitors. The existing monopoly may result in optimum outcomes in the digital markets. It may be hard to maintain the same

model in the future since various factors could affect the ultimate consequence. Thus, it will be better to include appropriate government intervention to deal with monopolization and predict market trends since the theoretical model is sometimes incorrect.

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