

Shanghai after the Blockade: An Economic Analysis of Market Failure and Giffen Commodities

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Abstract

The purpose of this paper is to analyze this phenomenon in depth from an economic point of view, and to examine the economic causes, market structure, government interventions, and their impact on society. Under the impact of the global epidemic of New Crown Pneumonia, the Government adopted a number of restrictive measures to control the spread of the epidemic, which resulted in the market for various commodities changing considerably in line with the global economic downturn. As the epidemic spread and worsened, price volatility and supply-demand imbalance of specific commodities (Giffen commodities) became prominent issues. Based on the origins and economic implications of Giffen commodities, this paper analyzes this phenomenon in depth, taking into account examples from Shanghai during the epidemic, and examines the economic causes, market structure, government interventions, and their impact on society. It was found that the main reason for this phenomenon during the epidemic was the high demand in the market and the sharp decrease in supply due to government restrictions, which stemmed from the psychological fear of future survival. As the epidemic began to subside, the prices of Giffen commodities tended to return to normal, and the Government should take responsibility for regulating excessive prices.

Keywords

Giffen Commodities; Giffen Phenomenon; New Crown Pneumonia Epidemic; Price Analysis.

1. Introduction

1.1. Background:

As the world was swept by the new crown epidemic, the economic, social and health systems of various countries and regions were greatly impacted. During the epidemic, many countries and regions adopted various measures to contain the spread of the virus, such as imposing embargoes, restricting the movement of people, promoting social isolation and reinforcing health protection measures. As a result of these policies, consumer demand was reduced due to home quarantine and inability to work, and market supply was reduced due to lack of labor and prohibition of production. Shanghai, one of China's largest cities, is the country's economic powerhouse and an international center of finance, trade and shipping, playing an important role in the global economy. In the wake of the new crown outbreak, the Shanghai municipal government adopted a city-wide lockdown measure, restricting the movement of people and social contact to slow down the spread of the virus. During the home quarantine period, the public demand for necessities such as rice, flour, oil, vegetables and meat rose. This paper analyzes the changes in demand and prices from the perspective of Giffen commodities in Shanghai during the Xin Guan epidemic. Possible coping strategies for such changes in the Giffen commodity market are proposed, aiming to provide clearer insights and rational

explanations for future trends in the market. These strategies could help the global economy to recover more effectively from the recession [1].

1.2. Purpose of the Study:

The purpose of this dissertation is to provide an in-depth analysis of the causes and effects of market failure and the phenomenon of jiffy goods in Shanghai during the Xin Guan epidemic from an economic perspective. Through the use of economic concepts and models, it aims to investigate the price fluctuations of jiffy goods and their impacts on the society caused by the market imbalance between supply and demand in the special context of the epidemic sealing off the city. Against the backdrop of economic pressures, government restrictions, and market structure under the impact of the global New Crown Epidemic, and with examples from the Shanghai market, the paper will analyze in-depth the situation of a sharp decrease in market supply and a significant increase in demand under government control during the Epidemic, and focus on the changes this phenomenon has brought about in the price and supply/demand patterns of Jiffy commodities.

On the basis of exploring these phenomena, the paper will propose coping strategies with a view to providing an economic perspective for similar situations in the future. These strategies may involve the optimization of market regulation mechanisms, the improvement of government interventions, and how to more effectively maintain market stability in similar crises. Through an in-depth analysis of market failure and the Giffen commodity phenomenon in Shanghai, the paper aims to provide guidance to economists, policy makers and market participants in understanding and responding to these situations in similar emergencies in the future.

2. Impact of the Closure of the City on the Market

2.1. Direct Impacts of City Closures on Market Functioning:

The direct impact of the embargo measure on the functioning of the market is enormous. The measure restricts the travel of producers leading to business stoppages or production cuts and a decline in the supply of goods. In this day and age of advanced transportation networks for the exchange of goods, transportation restrictions and business shutdowns lead to shortages in the supply of raw materials and disruptions in the supply chain of manufacturing and service industries, causing delays and interruptions in the production chain. This prevents goods from being transported to the demand market and goods cannot be sold, resulting in a decrease in the supply of goods.

With the widespread spread of the new crown epidemic, the media and news increasingly emphasized the importance of medical resources, especially commodities such as masks and alcohol. In this case, people panicked about the impending outbreak and tended to buy more of the relevant commodities than they actually needed to assuage their worries. In this case, even though the demand is normal at the beginning of the outbreak, the subsequent public panic and worry can lead to overconsumption, thus making these resources less available and more valuable. In short, in the face of inadequate supply and psychological panic among consumers, the prices of medical materials skyrocketed in tandem with the increase in demand, resulting in the Giffen phenomenon. At the same time, the demand for non-essential goods decreased and some sectors such as entertainment and tourism were greatly affected.

3. Market Failures and the Giffen Commodity Phenomenon

3.1. Definition and Characterization of Giffen Commodities:

The demand curve for the Giffen good, which is a low level good in the market, slopes upwards, which means that as the price of the good increases, the quantity demanded increases. [2] This violates the law of demand, which states that as the price of a good increases, the quantity demanded decreases. The Giffen phenomenon refers to the fact that consumers tend to consume lower-middle class necessities rather than luxuries in an economic downturn. And in the market for those necessities, prices rise as demand increases, which is also seen as an anomaly in the law of demand.

During an epidemic, there may be more substantial price increases and surges in demand for Giffen commodities as a result of panic buying and supply chain disruptions. This is because people may be willing to pay higher prices for these commodities even if their prices increase because they are seen as essential for survival. For example, during the New Crown Epidemic, under the category of medical resources, masks, medicines to treat the flu, and resources to prevent the virus became Giffen commodities. For example, when the New Crown Pneumonia epidemic spread widely in China from late 2019 to early 2020, people realized that wearing masks was effective in preventing the spread of the epidemic, and the demand for medical resources such as masks surged, so it led to significant short-term price fluctuations of related medical resources. The price of medical masks rose rapidly, up to 28 times, with the price of a mask increasing from less than \$1 to nearly \$10. The combination of falling prices and increased panic has resulted in higher prices than before, while demand continues to grow as people struggle to buy more food to survive in isolation for a long time [3].

All in all, the Giffen phenomenon has become more prevalent in the context of the New Crown Pneumonia epidemic. In addition to the generalized Giffen goods such as instant noodles and junk food, which have seen an increase in demand in the face of declining incomes, more and more everyday goods have been included in the range of Giffen goods such as medical resources and everyday food. Prior to the epidemic such commodities obeyed the law of demand well, i.e. higher prices lead to lower demand. However, this new Crown Pneumonia has had a major impact on changing demand and supply. The closure of businesses and lack of motivation made the commodity more difficult to obtain in supply or transportation, and consumer panic due to the desire to survive greatly increased demand. These two factors worked together to create the Giffen phenomenon between medical resources and food, turning otherwise normal goods into Giffen goods.

4. Application of Economic Theory

4.1. Supply and Demand Analysis:

The underlying cause of price volatility in Giffen commodities is the positive correlation between the slope of the demand curve and the price, which is different from the negative correlation between the slope of the demand curve and the price of ordinary commodities. [4] When prices rise, consumers' purchasing power decreases and they reduce their consumption of higher-priced goods in favor of lower-priced substitutes. However, in the case of Giffen commodities, an increase in price leads to a decrease in the purchasing power of consumers, but due to the lack of substitutes, they are forced to continue to purchase Giffen commodities that have increased in price, which leads to an increase in demand and a further increase in price. [5] Therefore, price fluctuations of Giffen commodities are determined by the particular shape of the demand curve. In terms of changes in supply and demand, disruptions in the supply chain and sharp increases in demand can lead to fluctuations in the price of Giffen commodities [6].

4.2. Elasticity vs. Price Elasticity:

This paper analyzes the elasticity of price change of Giffen's commodity to demand through price elasticity. Price elasticity is the degree of sensitivity of the quantity demanded of a commodity to price changes. [7] For ordinary commodities, an increase in price leads to a decrease in the quantity demanded and a decrease in price leads to an increase in the quantity demanded, so price elasticity is usually negative. However, for Giffen commodities, a rise in price leads to an increase in quantity demanded and a fall in price leads to a fall in quantity demanded, hence price elasticity is usually positive. In this case, the extent to which price changes affect the market can be analyzed by the elasticity of demand. The elasticity of demand is the degree of sensitivity of the quantity demanded of a commodity to a change in some factor. For Giffen goods, the elasticity of demand is usually low because the lack of substitutes forces consumers to continue to buy Giffen goods that have increased in price. As a result, the quantity demanded does not fall significantly even if the price rises, and a fall in price does not significantly increase the quantity demanded. This means that the market for Giffen commodities is more volatile and price fluctuations can be sharp.

5. Market Structure and Market Failures

5.1. The Impact of Market Structure on the Giffen Commodity Phenomenon:

The effect of market structure on the Giffen goods phenomenon is significant. In monopolistic markets, suppliers can influence market demand by controlling supply and price, leading to the Giffen commodity phenomenon. In oligopolistic markets, competition among suppliers may lead to price wars, thus leading to the Giffen commodity phenomenon. In perfectly competitive markets, prices usually fall due to intense competition among suppliers, thus reducing the likelihood of the Giffen commodity phenomenon. Thus, market structure has an important impact on the occurrence of the Giffen commodity phenomenon.

5.2. Application and Explanation of Market Failure Theory:

The phenomenon of Giffen commodities can be explained by the theory of market failure. One of the important factors is information asymmetry. In the Giffen goods market, consumers may lack accurate information about the price and quality of goods, resulting in their inability to make rational consumption decisions. This may lead to consumers purchasing low quality goods, thus leading to the phenomenon of Giffen goods. In addition, externalities are also a factor in the Giffen commodity phenomenon. During an epidemic, the demand for Giffen commodities rises due to panic buying and hoarding, which may lead to a decrease in the supply of other commodities, thus affecting other consumers. Therefore, the phenomenon of Giffen commodities can be explained by factors such as information asymmetry and externalities in the market failure theory.

6. Government Regulatory Responses

This static management of the Giffen phenomenon of essential goods in Shanghai reflects the complex relationship between the market and the government. Shanghai epidemic situation is serious, sudden epidemic prevention requirements impact on the market order, the Giffen phenomenon of basic livelihood and social fairness and justice have a negative impact, relying solely on the market self-regulation and free fluctuation of prices, often unable to achieve the epidemic prevention and control to meet the consumer's survival goals. From the perspective of government regulation, it is the duty of the government to maintain regulatory order and safeguard social interests. The phenomena of market failure of regulation and price monopoly require the government to take relevant regulatory measures to maintain market stability, and

this study mainly puts forward its own thoughts and countermeasures from different perspectives of government regulation [8].

6.1. Scientific Control Of Giffen Commodity Prices

Price regulation during special periods should cover basic livelihood goods and key supplies during special periods, with different criteria for recognizing low-elasticity goods and elasticity products. For low-elasticity commodities that are basic to people's livelihoods, strict and strong criteria should be adopted; for elasticity products, such as key supplies, relatively loose criteria should be adopted.

For the existence of price monopoly phenomenon, it is necessary to rationally choose the determination method, scientific reference to the different situations in various provinces and cities, taking into account the good market order of price stability, and actively respond to the phenomenon of Giffen.

6.2. Technology Enabled Broadening of Regulatory Channels

The government's regulatory channels have become more complete, relying on technological empowerment to improve the regulatory policy on economic prices and strengthen the supervision of livelihood products on online platforms. Shanghai, with the help of the "one network", "one network unified management" two network construction, with the help of the "two networks" platform to share regulatory information, especially in the epidemic prevention and control of the offensive period, cross-departmental, cross-level interoperability of regulatory information, regulatory information in a timely manner to reach the grass-roots community, to promote the timeliness of regulatory information, and to promote the supervision of the community. In particular, during the period of epidemic prevention and control, regulatory information is shared across departments and levels, and regulatory information is transmitted to grassroots communities in a timely manner, so as to promote the timeliness, effectiveness and sharing of regulatory information, and maximize the efforts to solve the problem of the "last kilometer". Taking the online platform as an important basis, we attach importance to the development trend of the digital economy and network platforms, broaden the channels and means of price supervision for the digital economy and cross-border platforms, and reduce the regulatory blind spot formed by "data silos".

6.3. Scientific Adherence to Basic Supplies of Materials

In response to the price regulation of basic livelihood materials in Shanghai during the epidemic, the market supervision department issued a series of policy documents to ensure price stability during the epidemic, which played a positive role in stabilizing prices. Shanghai has received counterpart aid materials from many provinces and cities, the Shanghai government in the acceptance of materials at the same time, in order to maintain price stability, to take policy subsidies, tax incentives, etc., to the material supply sector to be compensated to ensure that the relevant departments in a special period of time is still able to scientifically guarantee the basic survival of consumers supply. The Shanghai Municipal Government regulates prices within its own scope of responsibility, and cooperates with other departments in the transportation and deployment of materials to ensure an orderly market [9].

The "imperfect" hand of the market and the "imperfect" hand of the government closely hand in hand, is the development and implementation of major emergencies under the basic principles of price regulation policy. Especially during this static management in Shanghai to combat price monopoly, analysis of the causes of the Jifen phenomenon can not be delayed. Special circumstances, commodity attributes affect the relationship between supply and demand, the Giffen phenomenon appeared, which in turn induced unnecessary losses in society. Combined with the other factors induced by the Giffen phenomenon, a comprehensive analysis of the reasons behind price gouging concludes that the special attributes of commodities under

the relationship between supply and demand and the market price monopoly is an important reason for price-gouging behavior. The complex relationship between the market and the government is embodied behind the price-boosting behavior, and the scientific nature of the government's price regulation policy is very crucial, which must fully understand the nature of price variations under emergencies and the possible effects of the regulatory policy, and in this way to continuously improve the policy mechanism and regulatory means.

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