

## Analysis of the Economic Problems About Masks from Legal Perspective during the Epidemic

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### Abstract

The most indispensable emergency supplies during an outbreak are masks. The dual role of travel prevention policy reasons and mask prevention and control functions has resulted in high demand for masks and high stickiness among the public. China's mask industry has upgraded and expanded and transformed from a daily production capacity of more than 20 million at the beginning of the outbreak to hundreds of millions today. In the face of the steep increase in the massive market demand, the mask market has been in chaos and related contract law issues have emerged, by now these related cases are very sufficient and very suitable for the practice, analysis, and research of contract law theory.

### Keywords

Epidemic; Mask; Public Law; Market Management.

## 1. Introduction

The prevention and control of the epidemic was a joint effort of the government and individuals, but also a joint effort of law and action. Economic law, which regulates economic relations through both macroeconomic regulation and market regulation, was of great use in responding to the epidemic. Since macroeconomic regulation at the beginning of the epidemic was mainly reflected in the distribution of materials, financial subsidies, interest rate cuts, and rate reductions, which are not relevant to the research content of this paper, the three economic issues of the masks from the legal perspective at the beginning of the epidemic are refined as research directions in the field of market regulation.

## 2. The Mouthpiece Market Supply and Demand Change Process Analysis

### 2.1. Pre-Outbreak Analysis

#### 2.1.1. Sub-Section Headings

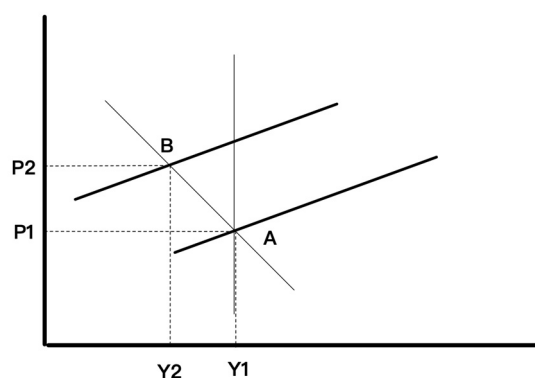


Fig 1. The supply shift curve

The outbreak occurred before the Chinese New Year (Spring Festival of that year: January 25, 2020) and was a public safety emergency. At this time, most mask factories have already entered the Spring Festival vacation state, which is far below the normal maximum capacity and cannot meet the demand for masks in the first outbreak. According to the supply shift curve, mask production moves from Y1 to Y2, and mask price moves from P1 to P2, which means that mask production is experiencing both stagnation (mask production falls) and inflation (mask price rises). To cope with this situation, mask manufacturers and government departments need to take effective measures.

The Mask production chain itself involves raw materials, equipment, plants, capital, manpower, access permits, the production cycle of seven elements, and the lack of one, according to statistics, every production of 5 billion medical masks needs about 100,000 tons of melt-blown non-woven fabric, mask demand for a substantial increase in the production pressure of raw materials such as melt-blown non-woven fabric steep increase. The production cycle of masks is long and requires a sterilization process, but the 7-10 day wait in the case of an epidemic emergency would allow the epidemic to spread significantly. At the same time, according to the government's epidemic prevention regulations at the time: the foreign mobile population needed to be quarantined at home for fourteen days, and the resumption of work by mask production workers was hampered, making the expansion of mask production difficult.

## **2.2. Mid-term Analysis of the Outbreak**

### **2.2.1. Domestic Situation**

After the outbreak of the initial "mask shortage", in March 2020 China's average daily production capacity of 200 million masks or more (exports alone need 100 million daily production capacity), the average price of 2 yuan, April national production capacity of at least 300 million daily or more. The demand for masks has been able to fill continuously, gradually, and steadily producing and meeting the domestic demand for masks. As of 22:00 Beijing time on April 24, 2020, although the domestic epidemic gradually slowed down, the global epidemic kicked off, when the global cumulative number of confirmed cases was more than 2.76 million, with more than 2.68 million cumulative cases in addition to China, with 200 countries and regions around the world finding confirmed cases and 34 countries with cumulative confirmed cases breaking 10,000 people, the demand for masks gradually expanded from domestic China to international, and mask Exporters have become the economic dark horse.

At that time, the scope of business involved in the production of masks was more than 21,000 enterprises, mainly in Zhejiang, Shandong, Hebei, Beijing, and Henan, these areas but the number of mask production enterprises accounted for more than 60% of the country. According to the data released by the Ministry of Industry and Information Technology, the total output of masks in China exceeded 5 billion in 2019, and the total output value of the mask industry was 10.235 billion yuan. In addition, the industrial structure of mask production is single, and industrial profits and added value are not high.

### **2.2.2. Foreign Situation**

In mid to late April, the strategic role of masks as an epidemic prevention material was gradually recognized by countries and included in the list of standing military supplies. Most countries and regions severely affected by the epidemic took measures to seal off cities and countries. The vast majority of businesses and shopping malls shut down production, residents restricted going out, and unemployment rates rose. In such a situation, masks have long been off the market in foreign countries and are in short supply.

Countries at the peak of the epidemic infection at the time encouraged their companies to increase domestic production of masks by shifting back to domestic production from China to get rid of the long-term dependence on China for mask production. For example, 3M

(headquartered in the U.S.), the world's number one mask company, accounted for 90 percent of the Chinese mask market before the outbreak, and in early April the U.S. Defense Industrial Production Act required that 3M prioritize the current medical shortage in the U.S. and restrict exports to other countries.

Under the impact of the new coronavirus pneumonia outbreak, the problem of insufficient medical protective masks equipment faced by foreign hospitals worsened, and many foreign companies at the time pinned their hopes on the rapid development of a vaccine to alleviate the gap between supply and demand for masks. In retrospect, from the beginning of the outbreak to the period of vaccine development and promotion, there was a golden period of at least one and a half to two years for the development of masks and other medical products, despite the chaos.

## **2.3. The Outbreak of the Epidemic at the Beginning Masks Economic and Legal Issues Extracted Analysis**

### **2.3.1. Price of Masks is Inflated**

During the epidemic control period, on the one hand, it was difficult to meet the huge demand for epidemic prevention materials for a while, which led to an increase in the prices of epidemic prevention materials such as masks and medical alcohol. On the other hand, the epidemic disrupted transportation and the demand for food supplies in some areas, which led to a rise in prices. Consumers had to accept expensive goods for epidemic prevention and living needs, which gave unscrupulous individuals an opportunity to take advantage of the situation and seriously violated the Price Law, which has been in effect since 1998.

In response to this problem, to regulate the market price of goods, the relevant departments around the world have repeatedly issued regulations such as "it is strictly prohibited to take advantage of the opportunity to inflate the price of masks and disturb the market price order, and those with serious circumstances may also be held criminally liable", and market supervision departments at all levels have spared no effort to crack down. The State issued the "Guidance Opinions of the General Administration of Market Regulation on Investigating and Dealing with Price Inflation during the Prevention and Control of the New Coronavirus Pneumonia Epidemic", which, by the Price Law, the Provisions on Punishment for Price Violations, and other laws and regulations, provides in detail for operators to fabricate or disseminate information on price increases and price inflation (F.D.), to ensure that the prices of various types of epidemic prevention products, including masks, and basic civilian products are stable during the epidemic. The regulations provide for detailed penalties for operators who fabricate or disseminate information about price increases or price gouging to ensure stable prices of various types of goods, including masks, and basic consumer goods during the epidemic.

During the initial outbreak of the epidemic, the State Administration of Market Supervision exposed typical cases of price violations, mostly for the price of masks to be inflated. One of the public cases of mask price inflating originated from Fengtai, Beijing, which is very close to Minda. Beijing Ji Min Kang Tai Pharmacy Fengtai District, the fifty-fifth branch of the excuse mask and other epidemic prevention supplies demand surge opportunity, the purchase price of 200 yuan/box of 3M brand 8511CN type mask (ten pack), a substantial increase in price to 850 yuan/box for external sales, while the same period the mask network selling price of 143 yuan/box. Beijing Fengtai District Market Supervision Bureau inspected the behavior of significantly raising the sales price of N95 masks based on the report. After investigation, it was determined that the person's behavior violated the Price Law, the Provisions on Administrative Punishment for Price Violations, constituting the illegal act of price inflating, and imposed an administrative penalty of a fine of 3 million yuan.

In the above case, the sensitive market mechanism caused the price of masks to be inflated, while the equally sensitive government intervention mechanism successfully stabilized the price of masks and ensured the supply of basic livelihood anti-epidemic materials at a reasonable price that people could afford. The linkage and checks and balances of the two mechanisms reflect the basic spirit of economic law and its important role in regulating the market.

### **2.3.2. Poor Quality, Harmful Masks into the Market**

During the epidemic, the quality of the market for epidemic prevention materials is also chaotic. Data from the Ministry of Public Security on February 5, 2020, shows that poor quality and harmful masks are frequently found in the market. As of February 5, public security authorities nationwide had cracked more than 1,000 cases of fraud involving the epidemic, arresting 294 suspects and recovering more than \$6.6 million in stolen money. Some unscrupulous subcontractors took advantage of the consumers' eagerness to seek epidemic prevention materials to sell counterfeit and shoddy materials, among which the counterfeit and shoddy pop-up masks were the worst, which seriously affected the consumers' rights and interests and the epidemic prevention process, and seriously violated the Product Quality Law and the Law on the Protection of Consumer Rights and Interests. In the face of such problems, the State has further strengthened its market supervision efforts and strictly investigated and cracked down on the production and sale of counterfeit and shoddy materials by the Interpretation of Specific Legal Issues Concerning the Handling of Criminal Cases of Obstructing the Prevention and Control of Disasters such as Outbreaks of Infectious Diseases.

According to my research, there are two main trends in the illegal sale of counterfeit masks. One trend is that "counterfeiters" operate illegally during the production process of masks. One trend is to focus on "inferior" by recycling used masks that have lost their use value and selling "toxic masks" with poor quality and easy to accelerate the spread of the epidemic. The masks are Class II medical devices and are sold knowing that the used and reconditioned masks do not meet the relevant safety and production standards, which can be considered a "serious hazard to human health".

### **2.3.3. And in Response to the Above Two Trends, I Analyze Judicial Practice Shows Respectively**

#### **1. Collecting discarded masks and refurbishing sold "toxic masks" case**

At the beginning of the outbreak, public security departments and market supervision departments around the world received complaints from the public about certain businesses collecting discarded masks and selling them after refurbishment. However, due to the difficulty in tracing the source of the discarded masks and the difficulty in verifying the evidence in the investigation of such cases, the penalties for such reports were all characterized as "production and sale of counterfeit and shoddy goods" and did not rise to criminal liability. However, according to Article 145 of the Criminal Law of the People's Republic of China, if such behavior can be verified, the businessman will be punished by imprisonment. It can be seen that although this kind of behavior is only subject to the regulation of economic law, its nature is bad and has a great negative impact on the economic market of masks.

#### **2. Sale and production of counterfeit well-known trademark mask products (Piaoan mask case)**

Piaoan mask is a well-known trademark of China's mask production, fake Piaoan mask sales events during the initial outbreak of the epidemic in 2020, the related cases showed a national trend, the number of cases involved in a wide range, involving a large amount of money, seriously disrupt the economic market order of the mask when the epidemic first broke out.

For example, Sichuan Nuohongkang Biotechnology Company purchased 1.01 million "single-use medical masks" with a value of 1.3 million yuan from Shanxi Huatian Baoli Trading Company, and individuals who counterfeited the trademark of "Piaoan" and failed the

inspection, and sold them to Hunan and Chongqing. The company made illegal profits of more than 500,000 yuan after selling them to Hunan, Chongqing, and other places. The Jinniu District Market Supervision Bureau of Chengdu transferred the case to Chengdu Public Security Bureau according to law, which opened a case for investigation of the alleged sale of counterfeit registered trademark goods. After that, the Jinniu District Market Supervision Bureau confiscated the illegal proceeds and relevant counterfeit medical masks and imposed a fine by Article 63(1) of the Regulations on Supervision and Administration of Medical Devices.

#### **2.3.4. The Lack of Qualification of the Main Sales Body**

In the study of counterfeit masks, I found that I put too much emphasis on the quality of the masks themselves and neglected the qualification of the subjects selling the masks, just as I put too much emphasis on the market and neglected the market access in the study of economic law, a comprehensive economic law market regulation system must include both aspects. In the case of "toxic masks", there is no problem with the original production process of the masks, and the problem is with the person who recycles and sells the discarded masks. After analyzing a large number of counterfeit and shoddy mask sales cases, I combined the concept of the e-commerce sales operation and divided the lack of qualification of mask sales subjects during the initial outbreak into the following two patterns.

##### **1. Lack of qualification of sales subjects in B to B mode (inter-enterprise)**

The main sales entity of this model is a mask manufacturer, and mask distribution companies can be treated as corporate consumers in this model. It may be because corporate consumers, unlike individual consumers, have a stronger ability to defend their rights, and as the "A" side of mask production and supply enterprises, mask distribution enterprises, unlike individual consumers, are in a stronger market position. According to the relevant judicial cases on the sale of counterfeit masks, after the consumer complaints, most masks distribution enterprises will be sentenced to liability, that they did not check the qualifications of the supplier of the masks in question, did not establish a record system for the inspection of goods, in violation of the relevant provisions of the Regulations for the Supervision and Administration of Medical Devices, and at the same time, according to the Trademark Law of the People's Republic of China, ordered to correct, given a warning to stop the sale of trademark infringing products. and impose an economic administrative penalty on the mask distribution enterprise.

##### **2. Lack of qualification of sales subjects in B to C mode (between enterprises and consumers)**

The main sales entity under this model is the mask distribution enterprise, i.e. the mask distribution enterprise does not have the sales qualification and conducts illegal mask selling activities. According to China's "supervision and management of medical devices regulations" Article 40: "medical device business enterprises, the use of units shall not operate, the use of medical devices not registered by the law, no qualification documents, as well as expired, expired, eliminated." The provisions of the regulations, the businessman selling medical devices not registered according to law, its behavior violates the sale of medical devices not registered according to law has constituted an illegal act. And B to B mode subject qualification lack of processing results after the comparison fully reflects the protection of China's laws for vulnerable groups.

The above analysis is aimed at the typical pharmacy selling masks lack of subject qualifications, I saw in many cases more interesting "stationery store selling masks case" that a stationery store does not have the qualification to operate Class II medical devices, sales of unregistered Class II medical devices, in violation of the "supervision and management of medical devices regulations Article 40 of the provisions, was ordered to immediately stop the sale of Class II medical devices without filing illegal acts and give administrative penalties.

In the year 2022 when epidemic prevention and control is normalized, the sales surface of masks has been opened for market demand. Under the status quo of the convenient purchase

of masks that we are accustomed to, there lurks a lot of economic law compliance crises regarding the main qualification of masks. For example, can campus supermarkets sell masks to students without the qualification of operating Class II medical devices? And when students make mask purchases at campus supermarkets, will the qualifications of the subjects of Class II medical devices operating in campus supermarkets be verified?

## **2.4. The Current Stage of the Main Mask Contract Performance Legal Issues Extracted Analysis**

The related chaos has affected domestic production and consumption and brought a huge impact on the domestic economy. Preventing and controlling the normal operation of enterprises under the epidemic requires the cooperation of the government and individuals, as well as the cooperation of law and practice. During this period, contract law has played a serious legal role in regulating the normal operation of businesses, on the one hand regulating market chaos and on the other giving businesses a legal basis to face the new phenomenon. Having viewed the economic development of mask enterprises and their various situations of contractual failure under epidemic prevention and control from the perspective of contract law, I began to understand the important role of contract law in dealing with the protection of enterprises' rights, stabilizing their operations, restoring market order, and promoting the epidemic prevention process.

During the period of epidemic prevention and control, some pharmacies have taken the opportunity to raise the price of masks, not mark prices, and other price violations that disrupt the market price order. Article 127 of the Contract Law provides that "the administrative department for industry and commerce and other relevant administrative departments in their respective areas of competence, per the provisions of laws and administrative regulations, the use of contracts to endanger the national interest, social public interest violations, responsible for supervising the processing; constitutes a crime, criminal liability." Although this article belongs to the citation of the law, can not play a judge normative function alone, but also for the sudden public events of social interests of the legal protection of their answer.

The epidemic cannot be interpreted as "force majeure or change of circumstances" in isolation but must be analyzed in the context of the specific situation. To distinguish whether the obstacle to performance is caused by the epidemic itself or the government's prevention and control policy, to clarify the boundary between factual and legal inability, and avoid the inability to perform is caused by subjective "force majeure". Secondly, if the formal elements of force majeure are met, but there are obvious problems of tilting the rights and obligations of the subject, then the division of responsibilities between the parties should be re-examined from the perspective of the principle of fairness and the integration of the two systems should be considered. Thirdly, a suitable legal system should be selected in light of the actual situation of the case, with the fundamental purpose of achieving the purpose of the contract and safeguarding the legal rights and interests of the parties, and adjusting the rights and obligations of the parties after significant changes in the basis of the contract due to the epidemic, to achieve the maximum fair effect and jointly overcome the negative impact caused by the epidemic.

Comprehensive above and related cases, this paper, therefore, distills three legal issues of mask contract performance under the current stage of the epidemic.

### **2.4.1. Market-Side Performance Barriers Case - Change of Circumstances**

Company A enters into an agreement with B to procure a batch of N95 masks from Korea for the safety and protection of A's employees and pays the full purchase price of \$100,000 to B. B procures the N95 masks from Korea through personal channels, agrees to pay \$5 per mask, and pays a deposit of \$20,000. With the development of the epidemic, the price of N95 masks in Korea has increased significantly and is difficult to procure resulting in B being unable to

complete the supply by the specified date. Now B wants to cancel the contract with A on the grounds of a change of circumstances and refund the purchase price.

The principle of change of circumstances is not expressly embodied in the law, but is defined by academics as the basis of the contract is changed for reasons not attributable to the parties, and it would be unfair to continue to maintain the contract, in which case the parties can change the content of the contract or cancel the contract. The change of circumstances rule is based on the principle of fairness derived from the principle of the strict contract to balance and complement the product.

As for the interpretation of the change of circumstances, some scholars advocate splitting the interpretation into "circumstances" and "change" separately. As for the understanding of "situation", Wang Liming mentioned in the draft of the civil code scholars' proposal to understand the concept of "situation", focusing on the restriction of "related to the contract", the objective facts, and the objective facts and the breach of contract have a very little relationship, so it does not belong to the "situation". As for the "change", from the history of the change of circumstances, this principle was created to solve the problem of balancing the rights and obligations of the parties to the contract at the time of the conclusion of the economic environment and a significant change in the objective basis. Therefore, a "change" is an abnormal change that results in a loss of justice and balance in the rights and obligations of the contract.

#### **2.4.2. Case of Barrier to Performance at the Policy End - Force Majeure**

After the outbreak of the epidemic, an enterprise signed a contract with a mask trader for a batch of domestic disposable masks to resume work and production, but later, due to the government's unified management of the procurement of masks, the mask trader could not fulfill the contract as scheduled. According to the "three no" judgment standard, the contract was concluded when the epidemic had already broken out, which did not meet the condition of "unforeseeable", so the force majeure rule could not be applied to exclude liability. However, since the company needed the masks urgently when it resumed production, the parties adjusted the subject matter of the contract to KF94 masks by the principle of change of circumstances, and the contract was eventually performed as scheduled.

On February 10, 2020, the Legal Affairs Commission of the National People's Congress pointed out that the epidemic and its prevention and control measures are force majeure for parties who cannot perform as a result. Up to now, the Supreme People's Court has not yet made a clear statement on this issue, but the judicial policies issued by some local high people's courts have confirmed that the epidemic and its prevention and control are force majeure.

It should be noted that the scope of insurmountability includes the objective situation and the objective result after its occurrence, not only the objective situation itself. In a specific contractual relationship, different subjects have different perceptions of the epidemic, and the epidemic itself has a dynamic process of change in time and space, so the impact of the epidemic on the performance of a specific contract is dynamic and continuous rather than instantaneous, and it would be biased to identify the epidemic as a force majeure factor that impedes the performance of the contract.

#### **2.4.3. Case of Barrier to Performance at the Policy End - Force Majeure**

Jing in the absence of actual performance capacity forged Zhuhai a mold company, and three strange company N95 masks "procurement contract", remittance voucher way, deceive the victim unit Harbin a trading company, in the name of Zhuhai a mold company and the trading company signed three strange N95 masks "procurement service contract", want to cheat it is RMB 95 million, the trading company found that Jing provided The procurement contract and remittance vouchers are forged, did not pay and reported to the police, Jing was arrested by the public security authorities. Jing for illegal possession, in the process of signing and performing

the contract, cheating the other party's property, a particularly large amount, violating the socialist market economic order and the other party's property ownership, his behavior constitutes the crime of contract fraud.

In the face of the endless new types of scams, should actively implement the national requirements on the new development concept and safeguard the survival and development of private enterprises as much as possible. It should be able to vigorously combat criminal acts that attempt to profit from the epidemic, as well as protect the legitimate rights and interests of local and foreign enterprises by the law, and guarantee the continued healthy development of private enterprises.

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