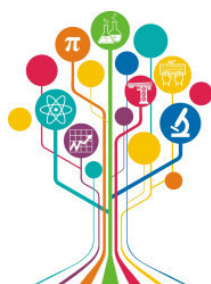


МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ РОССИЙСКОЙ ФЕДЕРАЦИИ



ПЕРСПЕКТИВЫ РАЗВИТИЯ ФУНДАМЕНТАЛЬНЫХ НАУК

Том 5. Экономика и управление

Сборник научных трудов

XVIII Международной конференции студентов, аспирантов
и молодых ученых

27–30 апреля 2021 г.

PROSPECTS OF FUNDAMENTAL SCIENCES DEVELOPMENT

Volume 5. Economics and Management

Abstracts

XVIII International Conference of students, graduate students
and young scientists

April 27–30, 2021



Национальный
исследовательский

Томский
государственный
университет



Томск 2021

УДК 339.92

**HOW TO DEAL WITH THE BLACK SWAN INCIDENT—BASED ON THE RESPONSE METHODS
OF SMALL-SIZED AND MEDIUM-SIZED IMPORT AND EXPORT ENTERPRISES UNDER THE
COVID-19 EPIDEMIC**

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**КАК ПРЕОДОЛЕТЬ СЛУЧАЙ ЧЕРНОГО ЛЕБЕДЯ - НА ОСНОВЕ МЕТОДОВ РЕАГИРОВАНИЯ
МАЛЫХ И СРЕДНИХ ИМПОРТНЫХ И ЭКСПОРТНЫХ ПРЕДПРИЯТИЙ В УСЛОВИЯХ
ЭПИДЕМИИ COVID-19**

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***Аннотация.** Эпидемия covid-19 (классический инцидент с черным лебедем), разразившаяся в 2019 году, повлияла на деятельность многих компаний, занимающихся импортом и экспортом. Автор исследует такие инциденты, чтобы снизить бизнес-риски компании.*

Introduction. The black swan event is to describe the unpredictable and unusual events. The COVID-19 epidemic occurring worldwide is the most representative example of the black swan incident. The spread of the virus all over the world disturbs the market order, and the import and export trades are the hardest hit.

This article first uses descriptive research methods to thoroughly analyze the black swan event. Secondly, this article uses the literature research method, case research method, exploratory research method, descriptive research method and experience summary method to discuss the situation of small and medium import and export enterprises and their response methods under the epidemic situation.

Research methods. Taleb defined that the black swan event generally has three characteristics [1].

The first one is unexpectedness. The occurrence of the black swan event is very surprising. For example, the election of US President Trump. At that time, Hillary Clinton had more political leadership and appeal than Trump. However, in the end, Trump won the election. Secondly, the occurrence of the black swan incident caused a huge impact on society, for example the British referendum vote to leave the European Union. At that time, the global financial markets reacted violently and quickly, and the exchange rate of the pound to the dollar fell to the lowest level since 1985 [2]. The final characteristic is interpretability. When the incident occurs, the logic of the incident is rearranged, and the hidden incentives can be found in the numerous data.

The black swan incident is not caused by a single cause under certain circumstances. Tong defines the occurrence of a black swan event as a formula $B = \{A|K, P, C, U\}$ [3], where B, A, K, P, C, U respectively refer to the black swan event, situation, intensity of knowledge, probability, consequences, and unpredictability [3].

In a specific scenario A , based on the conditional probability $P(B|A) = \frac{P(AB)}{P(A)}$ is not equal to $P(B)$ (the occurrence of the event B cannot exist in isolation from the situation A , and the situation A contains the event B , that is, B is a subset of A , $P(B|A) = \frac{P(AB)}{P(A)} = \frac{P(B)}{P(A)} > P(A) > P(B)$). It can be concluded that the probability of a completely random event occurring is much higher than that of this event occurring under specific circumstances [4]. Moreover, when people have more knowledge, it is easier to predict events with a smaller probability, to some extent, to predict the occurrence of black swan events [5]. Therefore, the occurrence of black swan events is based on specific circumstances. The COVID-19 happened in this particular situation. People did not expect it and they lacked intensity of knowledge.

With the spread of the epidemic, small and medium-sized import and export enterprises have faced some problems, among which the most notable are:

1. The capital chain of SMEs is tight or severely broken. With the expansion of the virus and the increase in the incidence of disease, countries closed customs gates to control the spread of the epidemic. Under such conditions, the company's businesses were severely affected, and the company's operations fell into difficulties. All enterprises are affected, which will increase the speed and difficulty of corporate repayment and increase the pressure on the capital chain. Therefore, small and medium companies should reserve at least half a year's turnover of basic liquidity to ensure the company's stability in unexpected situations.

2. People's desire to buy is reduced. Since the spread of the epidemic, the governments have closed the countries. The reduction of imported materials has led to a relative increase in the price level (commodities have risen because the supply of products in the market is less than demand, which has caused the price of goods to rise). The desire to buy in turns affects the company's selling.

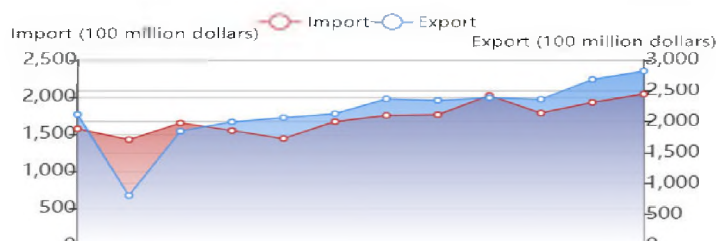


Fig. 1. China's import and export cargo situation in 2020[6]

3. Costs have risen across the board. With the emergence of government restrictions and the breaking of the market supply and demand relationship, the detention time of import and export customs has increased, and the transportation cost has increased overall, thereby further increasing the company's expenditure. For example, the Chinese government has proposed a strategy of transferring exports to domestic sales. This strategy is to consume domestically exported materials and reduce various costs.

Although the difficulties caused by COVID-19 are not easy to overcome, the COVID-19 is a black swan event. The author found two methods to deal with the black swan event in previous studies.

1. Adapt to the black swan event. Taleb tells everyone not to try to predict the black swan. In fact, he not only wants to show that small probability events cannot be predicted, but more importantly, it is because these special events are beyond our ability, we should pay more attention to the environment.

2. Seize the opportunity [7]. Seize the opportunity brought by the Black Swan incident. Change from passive attack to active attack. For example, the profits brought by the mass production of masks in the Chinese manufacturing industry. Many small and medium-sized factories in China have resurrected because of the production of masks.

In conclusion, these suggestions have given the most basic vigilance to small and medium import and export enterprises. However, these suggestions are not enough to solve the current difficulties faced by enterprises, and they are not useful protective measures to prevent the black swan incident.

Results. Based on the methods proposed by predecessors, the author proposes the following new methods.

1. Maintaining a cash flow stable. Firstly, companies should purchase shares of other industries to increase the risk resistance coefficient. Secondly, companies need to control their liabilities to reduce the pressure on the capital chain during emergencies. Finally, companies need to focus on market changes and reduce backlogs.

2. The enterprise should have a sense of crisis and establish new crisis prevention methods. In daily operations of companies, the company should sometimes hold special discussion meetings (brainstorming) for the black swan event. The candidates for the meetings of the companies are selected by lottery from each department. After the meeting, all suggestions and content are summarized, categorized, archived, and data analyzed, and the company uses data analysis to select opinions that are worth adopting. Therefore, when companies encounter the black swan incident again, the reaction speed will increase and the losses would be less than this time when those companies faced with the COVID-19.

3. New working mode. The company can change some non-essential offline offices to online. The company sets daily tasks for employees, and they need to complete tasks. In this mode, the company's operations will not be subject to a major impact during emergencies, which guarantees the company's stability.

Conclusion. This article focuses on the basic characteristics of the black swan incident and how small and medium import and export companies internationally deal with the epidemic. This article has enriched the research on "how to deal with the black swan incident" and the "practices of enterprises in the face of emergencies".

Due to limited time and funding, this article does not take experimental method to verify the effectiveness of the strategy. It is hoped that successors can enrich the research in the experimental direction.

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