The Research of the Decline of Hong Kong Port: A comparison with Singapore Port

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Abstract: Hong Kong port used to be the leading position in the world, but it has recently declined. The essay will find out the reason why Hong Kong port loses its leading position; the essay conducts an in-depth study of Hong Kong port and Singapore port: comparing the features and patterns of Singapore port and Hong Kong port; listing the data of Singapore port, Hong Kong port, Shenzhen port and Guangzhou port from 2004 to 2020; analyzing the development trend of these ports. The essay concludes with two reasons explaining the decline of Hong Kong port. One is that the user base of Hong Kong port is weak, and the other is that Hong Kong port has no geographical advantage over its competitors.

Keywords: Hong Kong Port, Singapore Port, Port Construction

1. Introduction

Nowadays, globalization encourages countries to hold transnational co-operations and free trade, which requires a bridge enabling countries to interact with each other. Waterway, the most economical way in large-scale cargo transportation, which is regarded as the communication bridge. However, the efficiency of waterway transportation largely depends on the construction of ports. Thus, cargo handling capacity becomes a uniform standard to measure international trade and has been classified as a critical construction object by countries. What is more, a successful port's ratio of port benefits to social benefits is incredible. For example, Changbiao Zhong and Bingyao Lin's research in 2000, 'Discussion on a Quantitative Analysis Method of Port Social benefit ---- Take Ningbo Port as an example', conveys Ningbo port's ratio of port benefit to social benefit is 89.64 RMB [1]. It means per I RMB revenue made by Ningbo port will bring 89.64 RMB revenue to China. Hong Kong port is at the same level with Ningbo port, so maintaining the status of Hong Kong port in the world has significant influence on local economic development.

Scholars' research about the developments and features of Hong Kong port have lasted for many decades. For example, Cuiping Yang published 'The Analysis and comparison of the reasons for the success of Shanghai Port, Hong Kong Port and Singapore Port' in 2012, which illustrates the geographical features and working patterns of the three ports [2]. JianJun Sun and Jia Hu published 'The Comparison of logistics development modes of three Eurasian ports and its enlightenment' in 2014, which analyzes how Hong Kong port's modern function makes it successes [3]. Huang lv's 'Does Shenzhen port business threatens Hong Kong port?' in 2005 interprets the cooperated relationship between Hong Kong port and other adjacent Chinese ports [4]. However, their researches do not foresee the decline of Hong Kong port, analyze the relationship between Hong Kong port and the

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mainland China, the increase in China domestic ports competition, and other underlying factors of Hong Kong port.

Therefore, the essay with the help of the comparison between Hong Kong port and Singapore port can convey the underlying factors that enable Singapore port to thrive and the causes of the decline of Hong Kong port, which can provide an educational indication of port construction. The essay will first present the information on the two ports, then analyze the data to explain why Singapore port can thrive and Hong Kong port declines and conclude the enlightenment from these two examples.

2. The Introduction to Hong Kong Port and Singapore Port

2.1. Hong Kong Port

Hong Kong port is a free port in the southeast of the Asian continent coastline, seldom extreme weather bothering, surrounded by the South China sea on three sides. As South China's external communication window [3], Hong Kong port is one of the three best deep-water ports in the world. It plays a significant role in affecting South China's imports and exports, making Hong Kong port the ninth busy port in the world; Hong Kong port is also one of the famous world logistics centres. It has American, European, African, Hindu, coastwise, and other ship routes. It enables ships departing from Hong Kong port to arrive at over 500 destinations worldwide. Hong Kong port has developed road, rail and waterway connecting with Mainland China, especially the Pearl River Delta area, which is the most populous urban agglomeration worldwide. South China's trade with foreign countries significantly impacts the Hong Kong port's busyness degree and revenue growth because transferring imported and exported goods are the primary business of the Hong Kong port. So, the more South China associates with foreign capitals, the more the Hong Kong port is more attractive to ships, and the more revenue is made.

2.2. Singapore Port

Singapore port, an OK deep-water port, is at the southernmost edge of Malaya and the southeast of Malacca, where it is easy to reach all Southeast Asian countries on the waterway. It is seldom affected by storms and earthquakes, and it has no froze problems, and allows ships to access the whole year-round. Malacca, the 'Asian sea lifeline', is one of the essential straits in the world, where about one hundred thousand ships pass the strait annually. Due to its unique geographical location, Singapore has become the busiest transit port in the world: every 12 minutes on average, and a ship will sail in and sail out from Singapore port; Unlike Hong Kong port, geographical factor compels ships to pass by Singapore port, so Singapore port does not worry about its attraction to users [3]; Singapore has mature port industries, which play as the economic hinterland of the port, such as processing industries, services industries and logistic industries. When cargo arrives at the port, these mature industries can meet all demands generated from these cargoes, making Singapore dramatic profits.

3. The Analysis of Hong Kong Port's and Singapore Port's Cargo Handing Amount

3.1. The Analysis of Figure 1



Figure 1 [5]. The cargo handling amounts of four ports from 2004 to 2020 (Photo credit: Original).

Figure 1 illustrates the change in cargo handling data of Singapore port, Hong Kong port, Shenzhen port and Guangzhou port from 2004 to 2020 [5]. It informs us that the cargo handling data of Hong Kong is initially slightly higher than Singapore port at the beginning of the 21st century. However, Singapore port's data demonstrates an optimistically upward trend, while Hong Kong port's data is generally downward. Then Singapore port surpasses Hong Kong port in 2005, and the gap between Singapore port and Hong Kong port keeps enlarging. In 2020, the cargo handling data of Singapore port has been almost two times higher than Hong Kong port.

3.2. The Reason for the Expanding Gap

3.2.1. Hong Kong Port only has One Real User Base

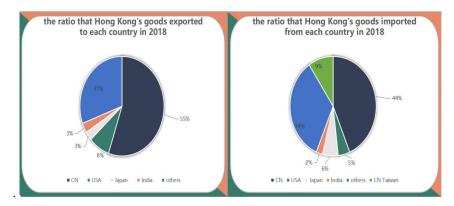


Figure 2 [6], the partners that Hong Kong import and export goods in 2018 (Photo credit: Original).

Hong Kong port is limited to South China's external communication 'window'. According to Figure 2, about 55 per cent Hong Kong goods were purchased by China in 2018, and 44% of Hong Kong goods were imported from China [6]. China is the biggest commercial partner, the biggest consumer,

and the biggest supplier to Hong Kong. Unlike Singapore, Hong Kong does not remain any industrial ability, and the tertiary sector generates over 90 per cent of Hong Kong GDP, so Hong Kong can manufacture few products and provide few industrial services to its consumers. Thus, Hong Kong port's function is limited to processing the trade between South China and foreign countries. That means the only real user of Hong Kong port is South China. Singapore port has more diverse users compared with Hong Kong port, such as Japan, Korea and China. Malacca is these countries' significant energy transport corridor because it is the only economical way for ships from oil countries to reach the East Asian countries. For example, China's 80 per cent of imported oil is shipped through Malacca, and the situations of Korea and Japan are similar with China's. It means these three countries' ships will pass by the Singapore port and have a significant possibility of berthing at the port. Thus, Singapore port has more than three real users. More users of Singapore port mean a more significant potential market and business for Singapore port than Hong Kong port. So, Singapore port's cargo handling amount can grow faster than Hong Kong port.

3.2.2. Hong Kong Port Loses Its Monopoly of Export and Import Business to South China

2.3.2.1.Hong Kong Port's Overall Efficiency is not at the Leading Position Compared with Its Competitors

Hong Kong port has no longer been the only access to foreign capital accessing South China already, and more and more new ports are rising and competing with Hong Kong ports corresponding to the development of China. For example, Guangzhou port and Shenzhen port are two of the most important and busy ports worldwide, and both are less than 100 kilometers from Hong Kong port in a straight line. So, the time is taken by ships arriving at each port almost equal. Figure 1 informs that Shenzhen port and Guangzhou port are behind Hong Kong port in 2004, but they successively surpass Hong Kong port in 2012 and 2017 and enlarge their gaps to Hong Kong port. Unlike Hong Kong port, which has a history of more than 160 years, Shenzhen port and Guangzhou port are constructed in the 1980s and 1970s, meaning they have the newest equipment to catch up and even surpass the cargo processing efficiency of the Hong Kong port [7]. In 2021, the average times of ships berthing at Hong Kong port, Shenzhen port and Guangzhou port are 0.9 days, 0.85 days, and 1.24 days [8]. Although Hong Kong port always keeps upgrading its port equipment, the efficiency of Hong Kong port has been surpassed by the Guangzhou port and not far by the Shenzhen port.

2.3.2.2.Hong Kong Port has no Geographical Advantages Compared with Guangzhou Port and Shenzhen Port

Shenzhen and Guangzhou are the core cities of the Pearl River dealt, and they have developed transportation systems connecting every corner of the Pearl River Dealt [7]. Most Hong Kong port's orders are from or come to the Pearl River. If cargo can directly leave or reach the Pearl River Dealt through Shenzhen port and Guangzhou port, there is no need to deliver cargo to Hong Kong port. Otherwise, the labour cost in Hong Kong is three times more expensive than the labour cost in Shenzhen and Guangzhou, which means the process by which that Hong Kong port transmits cargo to mainland China will create extra fees compared with going through the other two ports. Thus, the existence of Shenzhen port and Guangzhou port means that foreign capitals save the cost generated by transporting cargo from Hong Kong port to mainland China. Hong Kong port will become less and less significant with the construction of ports in Guangzhou and Shenzhen.

4. The Suggestion for the Development of the Hong Kong Port

4.1. Hong Kong Port should Improve Its Working Efficiency

One of the competitors of Hong Kong port, Guangzhou port, has been fully automated and intelligent [9]. Their staff can complete loading and unloading tasks through long-range control with the help of the port computer, which daily operations can be carried out with only a third of the staff it used to have. What is more, the average wage of Hong Kong people is three than higher than the people in Guangzhou, so the operation cost of Guangzhou port is much less than Hong Kong port. The automation of Guangzhou port not only reduces the cost of human resources but also makes fewer errors and more precise calculations because computers process data fast and never rest. It enables the efficiency of Guangzhou port to surpass Hong Kong port, and Hong Kong port should learn from Guangzhou port. Hong Kong port should introduce Guangzhou port's technology to reduce the reliance on humans so that the operation cost is reduced, and the efficiency is improved. However, the automation of Hong Kong port will lead thousands of port workers to be unemployed, and the settlement of these workers will be a new problem. Suppose these unemployed workers cannot be treated well. In that case, the trade union and the protest will exert pressure on the government and the port, which will harm the port operation and the consumers' attraction.

4.2. Hong Kong Port should Lower the Prices of Its Services

The terminal operates of Hong Kong port performs ineffectively and lacks competitions, which makes the services expensive [9]. The other competitor of Hong Kong port, Shenzhen port, has a price advantage over Hong Kong port. Although Hong Kong port is only 20 kilometers from Shenzhen port, each standard container charged by Hong Kong port is approximately one-third more expensive than Shenzhen port: 700 USD for a 20 GP container shipped from Shenzhen port to Singapore port, while 900 USD for a 20 GP container shipped from Hong Kong port to Singapore port [10]. The higher price of each standard container means to higher cost of production to merchants, which contradicts merchants' primary intention, maximizing profits. Merchants will try their best to minimize the cost of production so that they can lower products' prices and maintain profits, and their products will be competitive and make more profits. The Hong Kong port's expensive services resist merchants from reducing the cost of production, so merchants will prefer to use Shenzhen port. So, the prices of its services are unreasonable. Thus, the Hong Kong government should introduce punishment mechanism to motivate the terminal operates compete with each effectively, which will lower the prices of services.

5. Conclusion

The essay researches and analyzes the advantages and operating patterns of Hong Kong port and Guangzhou port and gives the answers for Singapore port thriving and Hong Kong port declining in terms of the users bases and the market. Then the essay illustrates the drawbacks of Hong Kong port compared with its competitors and advises Hong Kong port to improve its operating efficiency and lower its prices of services. In the end, the essay indicates that the future construction of ports should focus on establishing an automation system and reducing operating costs. However, the essay's conclusion does not take the research on the administration structure of each port and include the impact of leadership's decisions into consideration.

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