ABSTRACT

Traditionally, all cities in the region of Pearl River Delta (PRD) took Hong Kong as a transit hub in terms of trading with the world. However, in recent years, high operational costs in Hong Kong ports have driven a search for cheaper alternatives. Macao and Zhuhai have tried to build their own deep-water harbours, but experience shows that they have not worked as well as expected. The possible causes include the problem of silting in the harbours, trade barriers, and inefficiency of management.

Hong Kong is well-known as one of the most successful transit ports in the world. Reviewing the history of the Hong Kong port seems like studying the way to success. So, in trying to identify its critical success factors, the result can be summarised as follows:

1. It has a natural, never-silted deep-water harbour;

2. The free port policy is adopted not only on material trade, but also on non-material trade as well. It creates conditions to make the city an international centre of finance, trade, industry (which has been recessing in the recent years), shipping, tourism and information technology;

3. It lies at the estuary or the entrance of the Pearl River and the centre of Asia (in terms of the shipping routes from Japan and South Korea to India and Middle East).

4. Its hinterland, the Pearl River Delta, has been one of the fast growing economic regions in the world.

5. The role of political neutrality in diplomatic affairs and the free port policies in trading has established intimate ties not only with those capitalist countries, but also with many communist countries or ex-communist countries including Mainland China, North Korea, ex-Soviet Union countries and those developing countries as well.

Theoretically, if there is a port under a similar operational environment as Hong Kong, e.g. the same free port polity, proximately operational cost, similar service quality, it should obtain a half market share in proper segment. Actually, people have done some research about the feasibility of constructing a deep-water harbour as a free port zone in a Zhuhai island called Dong Ao, which lies in 20 km away from Coloane. In this thesis, I continue developing these ideas. For facilitating the discussion, I assume that Dong Ao Port has been constructed in the form of a joint-venture, for instance, between Zhuhai and Macao. Operationally, this port would include 12-meter water depth, moorage, anchorage, berths, storage yard, warehouses, and other infrastructure which container terminals needed. It serves primarily for ocean-going cargo ships and aims at the marketplace of the region of westbound of Pearl River Delta (PRD).

Under this assumption, the derived freight volume of Dong Ao Port in the year 2005 is around 21.5 million tons. According to those relevant figures in Hong Kong, it should make around HK$450.45 million profit with this freight volume. Thus, it seems that the investment for the construction of a deep-water harbour in Dong Ao island, functioning with free port policy, may be feasible and cost-effective. However, the estimated cost for the first phase of the port construction project of Dong Ao Port will be HK$2 billion. So it is a kind of large, lumpy and high risk investment. Once the perceived risks of the investment outweigh the economic benefits, it will be difficult for the operator to quit from the industry because of the sunk costs of the investment.

Finally, the result of the analysis in the thesis is positive. Therefore, for the best benefits to Zhuhai, Macao and Hong Kong, I recommend the role of Zhuhai in this project to be the logistic base of the port, including construction materials, labour and back-end transportation network connecting to the port. For Macao, I suggest that it provide the front-end services of shipment, cargo loading/discharging, import/export, transit trade, cargo inspection, packaging, process, banking, telecommunication, insurance and fleet backup and other logistic base services. However, if the co-operation for the project is just between Zhuhai and Macao, the entry barrier for the port to the industry will be relatively high due to the insufficiency of financial resource, cargo terminal management experience, business partners, quality service

and goodwill. Nevertheless, with the involvement of Hong Kong, all insufficient factors above should be removed, because they are all the advantages Hong Kong possesses. In other words, the participation of Hong Kong in this project will be very helpful for the Dong Ao port to setup the same operational conditions as Hong Kong ports have. Hong Kong can take the Dong Ao Port as an extension of its cargo terminals. In doing so, it will integrate the Pearl River Delta transport network as a whole to compete with other transit port in the region of Asia.