

Impact of Cabotage Relaxation and PRD Competition To

Hong Kong Maritime Logistics Industry



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1. Introduction

For more than a decade (1990s to early 2000s), Hong Kong was the world's number one container port, having the highest throughput. In 2015, Hong Kong is ranked fifth, surpassed by Shanghai, Singapore, Shenzhen and Ningbo¹. Between 2011 to 2014, Hong Kong's drop in container throughput was stabilized. However, since 2015, the throughput has experienced significant drop. Further, in 2013 September, Cabotage policy was relaxed in Shanghai, one of the Mainland's free-trade zones. The structural reconfiguration of transshipment from coastal Mainland ports could significantly decrease Hong Kong's transshipment from these ports. There is also a strong competition from ports in the Pearl River Delta (PRD).

In the following sections, we discuss what contribution the logistics industries make to the Hong Kong economy, and current developments. Next, we report on China's recent Cabotage policy changes, and outline the consequences of similar relaxations in other countries. We then examine the impact on Hong Kong's transshipment throughput. Our study shows that the Mainland's changes could cut Hong Kong's transshipment by as much as 2.4 million TEU, 14% of current throughput. We discuss the short-term and long-term impact of Cabotage relaxation for Hong Kong and the Mainland's coastal ports. Moreover, we examine Hong Kong's cargo from the PRD. Our analysis shows that while transshipment throughput from the PRD has increased in recent years, it does not reflect the fact that actual PRD cargo handled by Hong Kong has largely remained unchanged. The increase in PRD transshipment is largely due to the switch from using ground travel (trucks) to river (barges). As such, such transshipment is double counted. In other words, the increase in river transshipment has masked the decline in overall throughput in Hong Kong and the corresponding drop in demand for logistics services.

Hong Kong, as a container hub port, is thus severely under threat. It should be noted that in the Policy Address of 2015, it stated that "Hong Kong is well positioned to serve as a springboard for Mainland maritime companies looking to 'go global', as well as a platform for international maritime companies to tap the Mainland market. Hong Kong has what it takes to become an important international maritime services hub for China and the Asia-Pacific region." In March this year, the "Outline of the 13th Five-Year Plan for the National Economic and Social Development of the People's Republic of China" has expressed support for Hong Kong in enhancing its status as international financial, transportation and trade centers. This policy paper is designed to provoke thoughts and action by the Hong Kong Government and various stakeholders to ensure our competitiveness can be sustained.

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¹ Ranking of Container Ports of the World, http://www.mardep.gov.hk/en/publication/pdf/portstat_2_y_b5.pdf.

2. Contribution of Logistics Industry to Hong Kong Economy

In 2014, there were 765,000 employees in the trading and logistics sector, 20.4% of total employment and accounting for HKD 515 billion (23.4%) of Hong Kong's total Gross Domestic Product (GDP). According to the Trade Development Council, Hong Kong as a transshipment port ranked 8th in terms of total trade in 2015 world merchandise trade. In 2015, Hong Kong re-exported 87.9% of its total import value, and this re-export value accounted for 98.7% of Hong Kong's total export value of HKD 3610 billion². Hong Kong's trade relationship with the Mainland is significant, being second only to the United States. In 2015, 8.7% of Mainland external trade was attributed to the bilateral trade between Hong Kong and China, with 49% of Hong Kong's import cargo from the Mainland and 53.7% of Hong Kong's exports bound for the Mainland³.

Within this sector, in 2014, the port and logistics component added HKD 75 billion of value to the Hong Kong economy, representing 3.4% of its GDP, supporting 9,500 companies and 190,000 jobs – 5.0% of the employment total⁴. As a transshipment hub, Hong Kong processed 326 million tonnes of shipments in 2014, in which over 90% were processed by the seaport. In terms of port throughput, over 85% related to China.

² Economic and Trade Information on Hong Kong published by the Trade Development Council (29 August 2016)

³ Hong Kong Monthly Digest of Statistics, March 2016.

⁴ Census and Statistics Department, "The Four Key Industries and Other Selected Industries in the Hong Kong Economy", March 2016

3. Maritime Transshipment Development in Recent Years

To provide a historical perspective and using 2001 as an example, we calculate the laden containers breakdown (Figure 1), based on laden containers TEU of import, export, inward transshipment and outward transshipment according to Hong Kong Shipping Statistics⁵. The port processed 14.2 million laden TEU, of which 45.5% were transshipment containers, and the rest belonging to import and export shipments, often referred to as direct shipments (Figure 1).

Of the total Hong Kong transshipment throughput, 41.2% involved China, with 22.6% involving the PRD and 18.6% non-PRD. Asia (excluding China) was 27.0%. America, West Europe, and others was 31.9%.

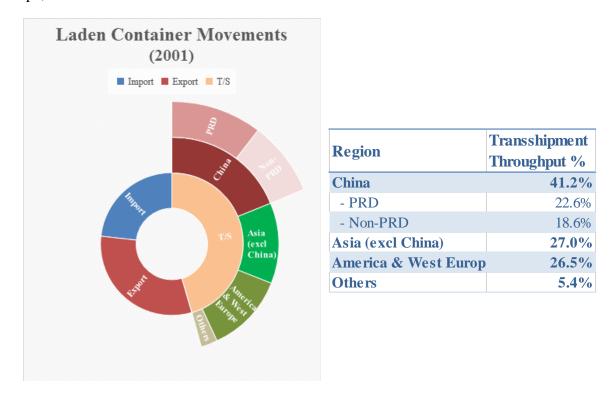


Figure 1. Breakdown of Hong Kong Laden Container Throughput in 2001

Since 2001, Hong Kong has declined as the dominant regional port. We saw strong growth rates in container volumes in the ports of Guangzhou (average annual growth rate of 19%), Shanghai (13%) and Shenzhen (12%), in comparison with less than 1% in Hong Kong during 2001-2015. Consequently, Hong Kong lost its position as the region's largest port, losing market share to Shenzhen and Guangzhou⁶.

⁶ Merk, O., Li, J. (2013), "The Competitiveness of Global Port-Cities: the case of Hong Kong – China", OECD Regional Development Working Papers, 2013/16, OECD Publishing

⁵ Hong Kong Shipping Statistics, Census and Statistics Department, http://www.censtatd.gov.hk/hkstat/sub/sp130.jsp?productCode=B1020008.

From a regional perspective, the total throughput of Hong Kong and Shenzhen ports has surged in the past 15 years, from 22.9 million TEU in 2001 to 44.3 million TEU in 2015, mainly due to China's booming economy. Total throughput has remained stable since 2010 (Figure 2).



Figure 2. Total Throughputs of Hong Kong & Shenzhen Ports

Since 1998, transshipment throughput in Hong Kong started to increase at a double digit growth, while direct shipments decreased. Based on the Census and Statistics Department reports, during 1998 to 2015, the percentage of transshipment in Hong Kong's total trade volume increased from 27% to 70%. However, the total laden container throughput started dropping from 2011 onwards, from 20.7 million TEU (2011) to 17.1 million TEU (in 2015) (Figure 3).

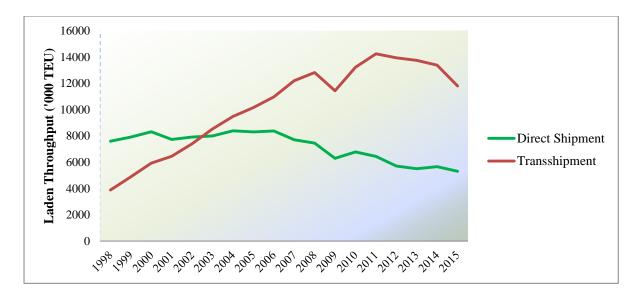
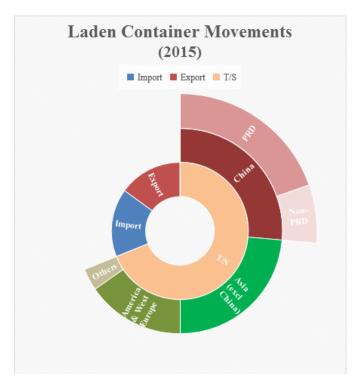


Figure 3. Hong Kong's Laden Container Throughput (1998-2015)

In 2015, of the total Hong Kong transshipment throughput, the Mainland was the largest with 38.4% (28.4% PRD and 10.0% non-PRD), Asia (excluding the Mainland) was 34.2%, and America, West Europe, and other countries was 27.5%. That means, of the total 11.9 million TEU transshipment, 4.6 million TEU were related to the Mainland (3.4 million TEU were PRD, 1.2 million were non-PRD). Figure 4 shows a detailed breakdown of transshipment. Such a breakdown is important to isolate the impact of Cabotage relaxation to Hong Kong's transshipment. In Section 6, we will show that the amount that will be impacted is twice the amount of 1.2 million TEU non-PRD transshipment. Next, we provide a brief discussion on Cabotage relaxation in Mainland China, followed by a detailed discussion of Cabotage relaxation in other countries.



Region	Transshipment Throughput %
China	38.4%
- PRD	28.4%
- Non-PRD	10.0%
Asia (excl China)	34.2%
America & West Europe	22.5%
Others	5.0%

Figure 4. Breakdown of Hong Kong Laden Container Throughput in 2015

4. The Overview of China Cabotage Rules

In this section, we review China's Cabotage rules. According to the Maritime Code of China, only vessels registered in China or hoisting Chinese flags are allowed to conduct costal shipping of cargo between Chinese ports. Foreign ships, or ships hoisting a non-Chinese flag, are not allowed to load a container in a Mainland port and unload it in another Mainland port. A Panama-registered ship, for example, having loaded cargo in Shanghai cannot immediately unload that cargo in Shenzhen. These restrictions, commonly termed the Cabotage Rule, are not unique to China. Numerous countries around the world, such as the US, United Kingdom, Indonesia, Philippines, Denmark have adopted the same practice, usually for reasons of protectionism, national security or public safety.

However, under "One Country, Two Systems", Hong Kong is not regarded as a Chinese port, therefore foreign ships that have loaded a container from a Chinese port may make a transit to Hong Kong and then call on another Chinese port. Hong Kong has benefited from China's Cabotage Rule as, out of the 20 million 20-foot containers moved through Hong Kong, 70% were classified as transshipment throughput in 2015. Of those containers, a little over half were Intra-Asia cargo flows, including Cabotage cargo of foreign ships which could be handled in Mainland ports⁸. With the increase in shipping capacity, foreign ships may travel to multiple ports in China before fully loaded or fully discharged. Hong Kong plays an important role to enable these ships to load and unload cargo.

However, the implementation of the China Pilot Free Trade Zone since 2013 could ultimately hamper Hong Kong's long-term economic prospects. Along with the launch of the pilot Free Trade Zone, there has been a gradual shift in the Mainland's policy on right of transportation between the ports.

In September 2013, the Ministry of Transport had officially exempted Cabotage Rule in the newly established Shanghai Free Trade Zone. Chinese-owned but foreign-flagged vessels are now allowed to transport goods between the Shanghai Free Trade Pilot Area and other Chinese ports⁹. Meanwhile, coastal ports such as Qingdao, Ningbo and Guangzhou have been lobbying hard for relaxation of the Cabotage Rules for foreign vessels¹⁰.

⁷ Maritime Code of the People's Republic of China Ministry of Commerce, People's Republic of China

⁸ "Maintaining Kwai Tsing Port's Regional Competitiveness Investing in Container Throughput Capacity and Operational Efficiency" http://www.hkctoa.com/

⁹交通运输部关于在上海试行中资非五星旗国际航行船舶沿海捎带的公告,

http://www.chinacourt.org/law/detail/2013/09/id/146936.shtml

¹⁰ "Maintaining Kwai Tsing Port's Regional Competitiveness Investing in Container Throughput Capacity and Operational Efficiency" http://www.hkctoa.com

5. Experiences from Other Countries on Cabotage Rule

5.1 Recent Cabotage policy in Western and Eastern countries

What lessons can be learned from other countries? Cabotage policy has been enforced in various countries for several reasons, including national security, economic and labour protectionism, public safety, and coastal shipping traffic monitoring. Some Western countries with restrictive Cabotage policies require goods transported along coastal ports to be carried on locally built and flagged ships. More restrictive countries require the ship to be owned and crewed by local citizens or permanent residents. Countries with tight Cabotage policies include the United States, Finland, France, Greece, Portugal, Spain, Sweden, and Italy. Most policies are set up with reference to Chapters 24 and 27 of the US Merchant Marine Act of 1920 (the Jones Act).

Some Western countries do allow foreign-flagged ships to transport domestic cargo along the coastal ports. These countries include Denmark, Germany, Netherlands, UK, Belgium, Iceland, Norway and Ireland. Such a policy could attract foreign liners to choose these ports as their transshipment hub.

Eastern countries, including Australia, Philippines and India, tend to adopt a liberal approach. Foreign-flagged vessels can access ports for coastal cargo business. Japan, China and Indonesia impose relatively more restrictive regulations. The government of Indonesia started to implement Cabotage rules in 2005 to support the business of locally-flagged vessels with the Maritime Law No. 17 while in Japan, with regulations in Article 3 of the Ships Act, foreign vessels cannot conduct coastal shipping of cargo or passengers between ports in Japan. Based on the above and similar review of other countries, we summarized the following range of restrictions in various countries is shown in Figure 5.

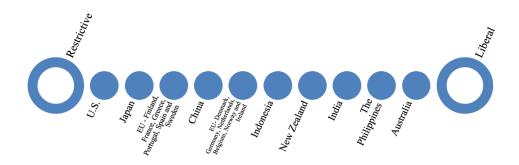


Figure 5. Countries with varying restrictiveness on Cabotage policy

Relaxing Cabotage rules has a spiral effect on maritime logistics. Domestic ship owners and operators, local ship crews and domestic distribution will be affected and dominated by the foreign-flagged vessels and their logistics business, as these foreign corporations are operating with incentives arisen from their home countries. These are evidenced from the policy changes in Indonesia and Japan in tightening Cabotage rules, and the Philippines and Australia in relaxing theirs.

5.2 Positive impact of logistics stakeholders under Cabotage relaxation

Relaxing Cabotage rules in a country exhibits diverse implications towards various logistics stakeholders. The policy changes in some Western and Eastern countries have brought positive and negative consequences to various logistics stakeholders (Figure 6). Stakeholders in favour of relaxing Cabotage rules include shippers, local governments (in varying levels), international shipping lines, ship builders, government officials from outlying islands and developing ports.

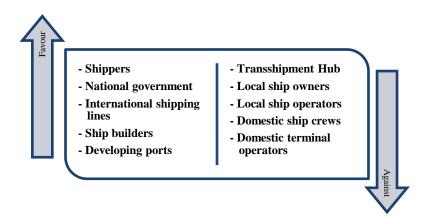


Figure 6. Views from logistics stakeholders towards Cabotage in general

Shippers in Australia and the Philippines, suffering from high domestic shipping costs with over 40% higher than foreign transshipment, could benefit from relaxed Cabotage rules¹¹. In the US, east coast refiners want the government to reform the Jones Act on Cabotage restrictions in 2016, saying the regulation puts them at a competitive disadvantage in their fuel and petrochemical businesses in US, Canada and Europe due to high shipping costs¹².

From the national point of view, governments (e.g. Union Shipping Ministry in India) believe relaxed restrictions may improve the economy and increase the overall transshipment volume. Facing the economy downturn threat, ports in Australia could use Cabotage as one of the policies to boost the overall economy, though a major hub in Australia might encounter the risk of having more unemployment.

International shipping lines with foreign flags would be the main beneficiaries of a relaxation in the law, as this can reduce port cost and operating cost of international shipping lines. Maersk said in 2015 that it was willing to invest US\$3 billion in Indonesia if the Cabotage law was changed. Similarly, Shipping Australia Ltd., representing the interest of international shipping lines, supported the deregulation of Cabotage rules in Australia.

12 "Jones Act: A new fight and a new argument" Hawaii Free Press, September 2016

¹¹ "Relaxing the Cabotage Restrictions in Maritime Transport" Llanto and Navarro

From the perspective of outlying islands and developing ports, any relaxation of regulations would be beneficial. The governor of Puerto Rico called for the Caribbean island and unincorporated US territory to be exempted from the Jones Act in 2015, considering the heavy debt burden of US\$72 billion.

5.3 Negative consequences to logistics stakeholders under Cabotage relaxation

Some stakeholders are concerned that Cabotage relaxation would have a serious impact on existing international hub(s) of a country. Ports in Australia warns that this aggressive deregulation in policy would result in the loss of 1,089 Australian seafarer jobs, impacting 93% of the current workforce¹³. Another major impact would be the loss of coastal business to local shipping company and ship owners. For example, the Australian National Line (ANL) in CMA CGM Group stressed that local shipping companies and their operators would be affected, as well as workers in rail and road transport businesses. The peripheral logistics and warehouse supporting activities in the logistics hub would be adversely affected due to the loss of business in the major hub. In Indonesia, the Cabotage rule was implemented in 2008 as the domestic shipping industry had been almost collapsed by the coastal transportation engagement of foreign vessels. The rule has successfully assisted Indonesia's ship owners in recovering this year¹⁴.

¹³ Australia's great loss: the end of maritime cabotage?" ship-technology.com, Grey E. Jan 2016.

¹⁴ "Utilisation heads south but Indonesia offers glimmer of hope" Offshore support journal

6. Analyses on Short-term and Long-term Impacts to Stakeholders

6.1 Short-term Cabotage effect to Hong Kong

Ideally, to determine the amount of transshipment affected by Cabotage relaxation, one would need to determine all the Hong Kong transshipments that use the Mainland's coastal ports. Such statistics are not directly available but aggregate statistics show either origins or destinations of transshipments. For transshipments destined to or originated from non-PRD China (and since Hong Kong is no longer a manufacturing base), such shipments must be originated or destined from other regions such as Asia and US. Hence, the total throughput affect by Cabotage relaxation would be twice that of transshipment throughput for non-PRD China (in Appendix A1, we provide a detailed calculation to illustrate this aspect).

Take 2015 as an example. The laden throughput accounts for 1.2 million TEU (see also Section 3). The Cabotage affected volume will be double the 1.2 million TEU, i.e. 2.4 million TEU. The total laden container throughput will drop from 17.1 to 14.7 million TEU over the coming years.

According to shipping statistics provided by the HKSAR Census and Statistics Department, the number of non-PRD related laden containers through Hong Kong has been dropping since 2011. As more free trade zones benefit from the relaxation of Cabotage rules, the decrease will be even more drastic. In the worst case scenario, Hong Kong could lose all transshipment involving the non-PRD region, resulting in a 14% decrease of the throughput of Hong Kong (Figure 7).

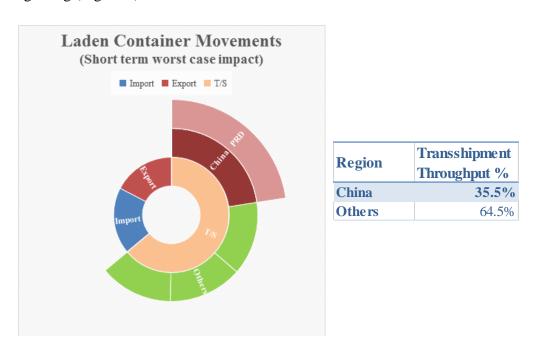


Figure 7. Worst Case Scenario: Losing all Transshipment from Non-PRD China

6.2 Long-term shrinkage to Hong Kong

Decrease in transshipment could lead to decrease in connectivity. As also pointed out in Section 5, in the long run, such a decrease could severely impact Hong Kong's capability as a hub, as most shippers and logistics service providers may easily swap to other more competitive hubs. One of the main reasons for Hong Kong being a major transshipment hub in Asia is due to its connectivity. Currently, there are about 340 container vessels sailing per week, connecting to about 470 destinations around the world¹⁵. Yet, Hong Kong is facing strong competition from Shenzhen ports, which has 131 international container routes, and 21 feeder routes¹⁶. Among these routes, over half of them are calling /covering ports in both Hong Kong and Shenzhen. Because of the Cabotage rule, Hong Kong is still a critical port for North East Asia transshipment to other international destinations. The relaxation may result in shipping lines shifting their transshipment to Shenzhen ports. The container throughput for Shenzhen has increased from 5 million TEU in 2001 to 24 million in 2015, while Hong Kong only increased from 17.8 million to 20 million in the same period.

Figure 8 is a forecast of Hong Kong's throughput in the coming years, making assumptions on several scenarios. While one may debate the assumptions and techniques used, the general downward trend is unequivocal. The forecasting is based on the assumption that the total throughput of Hong Kong and Shenzhen ports will remain constant in the next 10 years. Hong Kong's share has been decreasing (Figure 9). The share is used as dependent variable and time is an independent variable. The worst case corresponds to regression with data from 2001. The optimistic case corresponds to regression with data from 2007. Then Hong Kong's throughput is the proportion times the total throughput of Hong Kong and Shenzhen. As for the pessimistic forecasting with Cabotage, we assume non-PRD's volume (2.4 million TEU) will be lost in five years' time, given the constant decreasing rate.

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¹⁵ Maritime Hong Kong at a Glance, http://www.investhk.gov.hk/zh-hk/files/2016/06/2016.06-maritime-leaflet.pdf
¹⁶ "The World's Record-Breaking Container Ports", http://www.ship-technology.com/features/feature75321/



Figure 8. Forecasting of Hong Kong's throughput in different scenarios

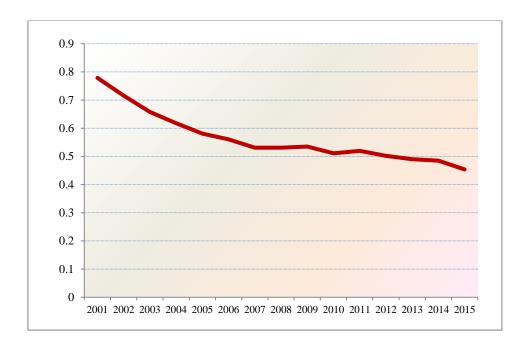


Figure 9. HK's Proportion of Total Throughput of Shenzhen and Hong Kong

6.3 The impact on Mainland China's domestic vessels

With the Cabotage rule imposed, all the domestic routes in China must be operated by China flagged vessels. As calculated from the Port Yearbook 2006-2013, about 55 million TEU, about one third of total container throughput in Mainland China was domestic cargo. The domestic cargo growth rate is almost double the international cargo growth in the past 5 years (Figure 10). We expect domestic trade cargo will equal international trade cargo in the near future.

Currently, with the Cabotage relaxation at Shanghai Free Trade Zone, foreign flagged Chinese companies can perform domestic shipping. This could threaten the Mainland job market as some of the employees on these foreign flags are hired overseas. If this rule is further relaxed, eventually foreign companies may replace a significant majority of domestic companies on the domestic shipping market. The shipping industry will be dominated by international ship liners. This will have a huge impact on Chinese companies whose major business is on domestic deliveries. It will be a major blow to the Mainland's maritime shipping industry, which is currently at a growth stage.

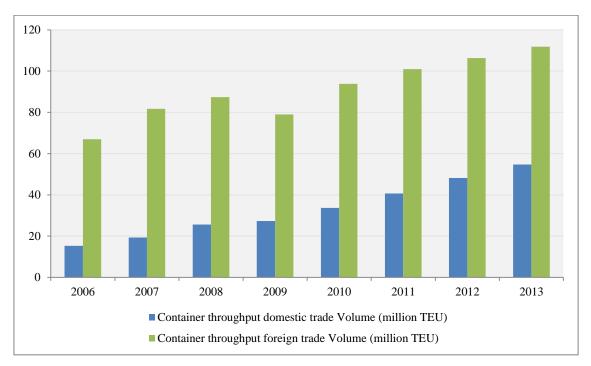


Figure 10. Container Throughput in Mainland China: Domestic and Foreign Trade Volume

7. Competition from PRD Ports – Impact to PRD-Transshipment

In the past 15 years, Hong Kong's proportion of the total throughput of Hong Kong & ShenZhen ports has continued to drop: from 77.8% in 2001 to 45.3% in 2015 (Figure 9). Guangzhou's Nansha Port also posts substantial threat to Hong Kong. According to Guangzhou's municipal government planning, Nansha Port aims at surpassing Hong Kong's throughput in 2017 and rising to the world's fourth largest port¹⁷. Most of the transshipments in Hong Kong with one leg in the PRD region are river cargo through the Pearl River. However, this could be double-counted as throughput contributed by transshipment related to PRD. For example, consider a container being shipped from Zhongshan via Hong Kong to Singapore. If the container is transported by truck from Zhongshan to Hong Kong, it will be counted only once for Hong Kong's total port throughput. However, if it is transported by barge through Pearl River to Hong Kong and transshipped to Singapore, it will be counted twice for the total throughput.

In recent years, we witnessed a considerate decrease in land transportation between Hong Kong and the PRD region¹⁸ due to the higher cost and shortage of drivers. Most of the cross border transshipments were transferred to river borne, which exaggerated the total throughput volume of Hong Kong (Figure 11).

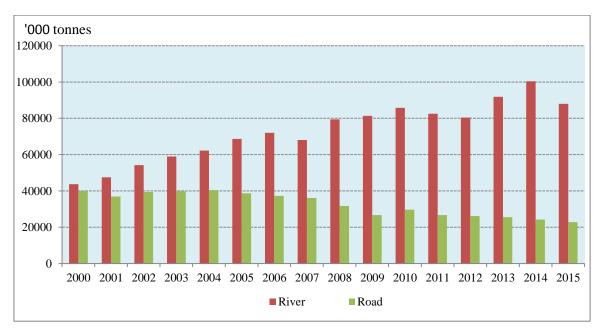


Figure 11. Hong Kong River and Road Freight Movements

Based on the transportation statistics, we counted transshipment only once. The red line in Figure 12 shows the actual cargo to and from Hong Kong. It is clear that the actual flow has been consistently dropping since 2006 (Figure 12). The danger of merely counting terminal throughput with the transshipment context could be misleading. For example, it has been

¹⁸ Summary Statistics on Port Traffic of Hong Kong, September 2016, Transport and Housing Bureau

 $^{^{17}\} http://www.hkcd.com/content/2015-09/25/content_960353.html$

assessed that Hong Kong's throughput has been stabilized due to growth in transshipment. While that is true in terms of terminal operating, it is not true in terms of economic impact to the region. In fact, the actual demand for container handling by various stakeholders of the logistics industry has been dropping.

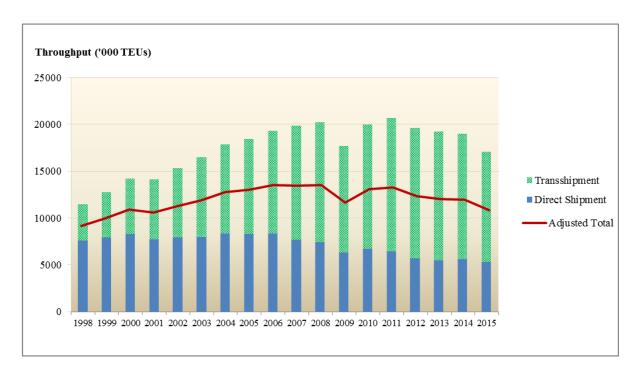


Figure 12. Hong Kong's Laden Container Throughput (When Transshipment is Counted only once)

Regionally, the demand for PRD cargo handling increased from 2001 to 2008, and stabilized from 2010 to 2015. However, Hong Kong's share of this market has been consistently dropping (Figure 9: from almost 80% in 2001 to the present 45%). Apparently, Hong Kong has been losing out to competitors in PRD. Clearly, an extensive study is needed to examine the competitiveness in this region. In the next section, we offer some preliminary recommendations regarding strengthening Hong Kong's competitiveness, along with recommendations to address Cabotage relaxation in the Mainland.

8. Conclusion and Recommendations

The Cabotage threat to Hong Kong is real. It could also have a negative impact on Mainland China. It is important to carefully review the impact and consequences when relaxing the Cabotage policy at a national level. The competitive advantages and strengths of Hong Kong being a world-class logistics and transshipment hub would be seriously impaired. Competition from PRD ports is also a major concern. We provide several recommendations below for all the stakeholders to consider, especially the government of Hong Kong and Mainland China.

8.1 On Cabotage Relaxation

1. Communicate Cabotage relaxation concerns to China officials

With the short-term and long-term detrimental impact of liberalizing Cabotage Rules in Mainland China, including the loss of transshipment cargo in Hong Kong and negative impact on terminals and domestic operators in Mainland, Hong Kong deputies of National People's Congress could provide feedback on the subsequent adverse consequences to the relevant government departments in Beijing so as to avoid further relaxation on Cabotage Rules. This could prevent and minimize the serious economic and labour impact to Hong Kong.

2. Consultation with stakeholders on the Impact of Cabotage relaxation to Hong Kong and Mainland

It is important that the Hong Kong Government should closely monitor Cabotage developments in Mainland. Leveraging the analysis of this report, the Government could conduct a further in-depth study on the impact of Cabotage relaxation on Hong Kong as a whole, addressing such questions as: Can Hong Kong continue to function as a logistics hub? What is the Cabotage impact to Hong Kong's employment and GDP? The study should involve consultations and forums, obtaining views from various maritime logistics stakeholders and associations in Hong Kong. This could also help the Hong Kong Government and the Hong Kong deputies of National People's Congress, in terms of providing feedback to government officials in Beijing. The in-depth study could also review the impact of Cabotage relaxation on domestic ship liners and the corresponding economic damages to Mainland China as a whole.

8.2 On Innovations to capture Emerging Market of the Region

1. Collaborations with PRD Special Economic Zones

The Singaporean government has been cooperating with neighbouring economies to create special economic zones to divert the migration of factories from China to nearby low cost locations such as Indonesia, in the hope of retaining headquarters of logistics corporations in Singapore. Similarly, the Hong Kong Government could further strengthen cooperation between Hong Kong and PRD regions to create synergies, such as setting up port back-up

land in the region to enhance port efficiency. In fact, a version of this has been promoted and supported by government officials in the Mainland and Hong Kong in the Guangdong-Hong Kong-Macau Cooperation zone. In general, collaborations between stakeholders in Hong Kong and PRD should be explored. This could include initiatives in inducing growth in import to the PRD region and capturing a portion of the huge e-Commerce market. These two aspects require structural changes and are discussed next.

2. Hong Kong as major Import Gateway of China

China's export economy is clearly slowing down, with significant growth on domestic consumption. In fact, China's import is forecast to increase 19. In terms of exporting cargo, Hong Kong's share of PRD cargo has declined consistently for many years, largely due to the fact that Hong Kong is relatively far from the cargo source. However, such is not the case with importing cargo. Because of Hong Kong's free port policy and well-established logistics connectivity, Hong Kong's import has always been a significant portion of Hong Kong's throughput. With China's increasing import, Hong Kong can leverage its import advantage to capture this opportunity, establishing itself as the major import gateway of China. This would require a holistic effort from stakeholders of supply chains. emphasis on export switching to import, the logistics emphasis thus switches from outbound logistics to inbound logistics. Terminal operators could work with sea liners and third party logistics providers to design efficient inbound logistics network, speedily reaching distribution centers in PRD and beyond (speed boats, barges, trucks, etc.). Of course, delays in cross-border customs will need to be minimized as well. Moreover, logistics providers can work with importers to develop total supply chain solutions, which could utilize maritime logistics.

3. To capture part of the e-Commerce Market

The total cross-border e-commerce transaction in China has reached RMB 4 trillion in 2015²⁰. China Ministry of Commerce estimates the transaction will be increased to RMB 6.5 trillion in 2016²¹. In 2015, there are already over 5,000 cross-border e-commerce platforms and over 200,000 enterprises conducting such business in China.

The e-Commerce market is huge. In fact, largely due to e-Commerce, air cargo throughout around the world has increased significantly and the trend is expected to continue. Such is the case with air cargo throughput in Hong Kong.

Can sea cargo capture part of the huge e-Commerce Market? With e-commerce platform and related logistics service providers emerging in Hong Kong, the government should support the industry in being the logistics hub for Chinese online orders and assist local firms in coping with the changes of import tax policies and customs clearance requirements in China²².

¹⁹ Szakonyi M. (2016), "China's export growth to fall, imports to rise, economist forecasts" JOC.

²⁰ "Logging In: Understanding e-Commerce in China", China-Briefing.

^{21 &}quot;China Cross-border E-Commerce to Exceed \$1 Trillion in 2016", China Internet Watch 22 "我国跨境电子商务的发展现状发展趋势与相关政策建议"国务院发展研究中心办公厅, China State Council Development Research Center, 2016.

Similar to the preceding discussion on developing efficient inbound logistics for imports, stakeholders in maritime cargo logistics should work together to capture part of the e-commerce market. Again, terminal operators, sea-liners, and logistics providers must work with shippers to determine the type of e-Commerce products that could be managed as sea cargo.

8.3 On Increasing the competitiveness of Hong Kong Logistics Industry

1. Upgrade logistics facilities and services to sustain development

Port competitiveness relies heavily on infrastructure and policy development, collaboration with nearby cities, and supply of suitable workforce and systems, all of which require leadership and support from the government. For example, both Mainland China and Singapore understood the benefits of effective logistics operations and implemented single-window operation - simplification of customs and excise duty procedure. However, it was estimated that Hong Kong can only adopt the single-window operation in 8 years ²³. Speeding up the development process is highly recommended. In addition, most ports have already adopted paperless operations and full automations, but Hong Kong is relying on paper for a significant portion of operations and limited automation was implemented.

The Hong Kong government should plan ahead to provide physical infrastructure and resources to maintain Hong Kong's operational effectiveness and capabilities. For example, Singapore and Shanghai are expanding the terminal capacity by relocating terminals and developing lands for maritime ports. Since 2001, the cumulative growth of container throughput in Hong Kong (13%) is far less than that in Singapore (99%) and in Shanghai (476%)²⁴. As ship sizes are to increase, to 20,000 or 25,000 TEU in the near future, the container port should provide berths with sufficient depth, land resources and efficient operations.

Innovative technologies and systems are also crucial to Hong Kong in providing world-class port and logistics services. Hong Kong government should collaborate with industry to launch innovative funding schemes for R&D projects.

8.4 On Incentive schemes to operate in Hong Kong

1. Headquarter incentive schemes and tax regimes for logistics companies in Hong Kong

Hong Kong must provide more incentives and schemes to attract investment from maritime and logistics corporations maintaining or setting headquarters in Hong Kong. Referencing the policies of international and regional headquarters awards offered by the Singapore and Shenzhen governments, Hong Kong should further evaluate the tax regime. Currently,

²³ "Public Consultation on the Development of Trade Single Window in Hong Kong" Commerce and Economic Development Bureau

The Global Competitiveness Report 2016-17, World Economic Forum (http://www.nmi.is/media/338436/the_global_competitiveness_report_2016-2017.pdf)

companies in Hong Kong are subject to profit tax of no more than 16.5% while companies, including logistics companies, who set up headquarters in Singapore, can enjoy concessionary corporate tax rate of 10% or lower for international headquarters and 15% or lower for regional headquarters. Singapore started the incentives in 1992 and further strengthened the policy in recent years²⁵. It has resulted in the headquarters and professional services segment contributing SGD 2.6 billion, the largest business expenditure among the segments in Singapore during 2015²⁶. In Shenzhen, subsidies are provided in the form of one-off sponsorship, land price reduction, long term land lease, sales related bonus or/and rental for logistics companies setting up or relocating their headquarters to Shenzhen²⁷. Similar policies were set up by Thailand in 2015²⁸. With increasing number of headquarters being set up in Nansha, Shenzhen and Zhuhai, Hong Kong should review and consider lowering the tax regime to avoid further shifting of headquarters from Hong Kong to Singapore and neighbouring cities in the PRD.

2. Financial assistance and incentive policies on ancillary shipping services

Financial assistance schemes and incentive policies from government on ancillary shipping services can encourage ship liners and logistics services subsidiaries to keep using Hong Kong as their operational hub. This incentive could also encourage shipping conglomerates to set up their corporate services functions in Hong Kong. Similar shipping-related support services incentives have been implemented in Singapore. Approved companies can enjoy a concessionary tax rate of 10% on incremental income derived from the provision of shippingrelated support services, e.g. ship broking, forward freight agreement (FFA) trading, ship management, etc. Financial assistance policy and ship berthing incentives should be considered to attract ship liners to choose Hong Kong as the transshipment and ocean-going ports. Other similar initiatives on ancillary shipping incentives have been introduced in India, the Philippines, Turkey and South Korea.

3. Increase extent of double taxation relief for trading

Although the Hong Kong Government has entered into bilateral double taxation relief arrangements with 42 trading partners as of April 2016, this is still far less than other countries including China and Singapore, with 99 and 65 trading partners respectively in 2014. Singapore also offers tax credit and exemptions. Shipping companies suffer on overseas taxes if the destination countries are not covered in the trading agreement. The government in Hong Kong could increase the number of trading partners to reduce the overall tax burden on the shipping community and attract more trading in Hong Kong.

²⁵ "How Singapore's incentives for headquarters evolved" The Nation

²⁶ "Economic Survey of Singapore 2015" Ministry of Trade and Industry Singapore

²⁷ "The battle for MNC investment heats up", http://www.chinalawandpractice.com/, November/ Dec 2012 ²⁸ "Taxation and Investment in Thailand 2015" Deloittee Touche Tohmatsu

Appendix A1

Explaining why Cabotage impact is twice that of non-PRD China Transshipment

In 2015, the transshipment accounted for 11.9 million laden TEU, among the 17.1 million total laden throughputs in Hong Kong. Of which, China contributed 37.5% of the total laden transshipment container throughput in Hong Kong. These transshipments can be categorized into Pearl River Delta (PRD) transshipment x_1 , which is mainly the hinterland cargo, and non-PRD transshipments x_2 .

The short-term effect of Cabotage relaxation will be on China non-PRD transshipments. Let the non-China transshipments be Y. Transshipment means shipping from origin A, via HONG KONG to destination B. Each transshipped container i or j, will be counted twice. The possible transshipment routes via Hong Kong, can be categorized as 1. China \longleftrightarrow Non-China, 2. Non-China \longleftrightarrow Non-China, and 3. China \longleftrightarrow China. As the domestic shipping cost in China is cheaper than Hong Kong, the number of shipments for category 3 is negligible. Therefore, the non-China transshipments Y can be separated into two parts, y_c shipments in or out of China, and y_n shipments unrelated to China.

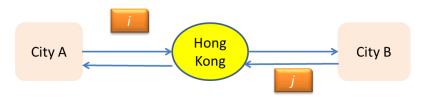


Figure A1. Illustration of Hong Kong Transshipment route

The total transshipments in Hong Kong equals to the sum of all i and all j, and times it by two.

$$T_s = 2(\sum i + \sum j) \tag{1}$$

If we consider from the shipment routes perspective, the total transshipments in Hong Kong can be represented as follows:

$$T_s = x_1 + x_2 + y_c + y_n \tag{2}$$

As the y_c means the other leg of the China related transshipments, it equals to:

$$y_c = x_1 + x_2 \tag{3}$$

Take 2015 as an example, according to the PRD and non-PRD proportion, x_1 equals to 3.38 million, and x_2 equals to 1.2 million TEU. Equation (2) becomes

$$3.38 + 1.2 + (3.38 + 1.2) + y_n = 11.9$$

 $y_n = 2.74$ (4)

Effectively, with the Cabotage relaxation, the impact is twice that of non-PRD transshipment. If the non-PRD transshipment decreases to the worst case scenario (i.e. zero), that means, not only is x_2 zero, y_c will only equal to x_1 . Assuming everything else remains constant, the new total transshipments becomes

$$T_s' = 3.38 + 0 + (3.38 + 0) + 2.74 = 9.5$$
 million (5)