Hong Kong’s Future Economic Development from the Perspective of Comparative Advantage

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1.1 Comparative Advantage

1.1.1 Ricardian Model

• Ricardian Model: A country is said to have comparative advantage in producing a good when it can produce the good at lower opportunity cost relative to other country.

• The relative costs differences reflects relative productivity (i.e. relative efficiency).

• The difference in labour productivity originates from technological superiority and competency.
1.1.2 Heckscher-Ohlin Model (H-O Model)

- According to H-O Model, availability of resources in a country provides another source of comparative advantage for countries that do not necessarily possess a superior technology. Comparative advantage can be obtained due to differences in relative factor endowments (Gupta 2015: 11).

- A country has a comparative advantage in the production of a commodity that uses the relatively abundant resource in that country more intensively.
1.2 Revealed Comparative Advantage

• The concept of revealed comparative advantage (RCA) was first developed by Balassa (1965) to measure the comparative advantage of a country. The RCA of a nation is measured by the relative weight of a percentage of total export of commodity’s in a nation over the percentage of world export in that commodity. RCA can be illustrated as follows:

\[
RCA = \left( \frac{E_{ij}}{E_{it}} \right) / \left( \frac{E_{nj}}{E_{nt}} \right)
\]

where,

- \(E_{ij}\) = Exports of commodity j by country i
- \(E_{it}\) = Total exports of all commodities by country i
- \(E_{nj}\) = Exports of commodity j by all countries
- \(E_{nt}\) = Total exports of all commodities by all countries
1.2 Revealed Comparative Advantage

• If $RCA > 1$, the country is said to have a comparative advantage in the commodity or industry. If RCA is less than unity, the country is said to have a comparative disadvantage in the commodity or industry.

• For example, in 2010, soybeans represented 0.35% of world trade with exports of $42$ billion. Of this total, Brazil exported nearly $11$ billion, and since Brazil’s total exports for that year were $140$ billion, soybeans accounted for 7.8% of Brazil’s exports. Because $7.8/0.35 = 22$, Brazil exports 22 times its “fair share” of soybean exports, and so we can say that Brazil has a high RCA in soybeans.
1.3 Competitive Advantage

• Porter (1985, 1990) developed a framework of competitive advantage. At the level of a firm, Porter emphasizes the importance of low costs, product differentiation and innovation.

• At the level of a nation, the central thesis behind Porter’s analysis is that a nation’s success/prosperity through trade is not “inherited”. It does not depend on the nation’s endowment of resources or the exchange rates.

• A nation’s prosperity is “created” by the nation’s firms that are successful in the world markets. “A nation’s competitiveness depends on the capacity of its industry to innovate and upgrade. Companies gain advantage against the world’s best competitors because of pressure and challenge. They benefit from having strong domestic rivals, aggressive home-based suppliers, and demanding local customers.” (Porter 1990: 73, quoted from Gupta 2015: 16)
1.4 Dynamic Comparative Advantage

- According to comparative advantage, a country which already has a large installed manufacturing base should be *relatively* better at automated manufacturing than at, say, farming.

- Conversely a country with lots of low skilled labour and little highly skilled labour should be *relatively* better at producing goods that require low skilled labour, and less relatively efficient at high-tech production.

- However, the capital equipment and the skills of a country’s labour force are not ‘endowments’ in the sense that countries may be endowed with abundant land, mineral wealth or long hours of sunshine.
1.4 Dynamic Comparative Advantage

• On the contrary, the stock of installed machinery is the result of a country’s history of capital investment in manufacturing by firms and governments.

• Similarly, the balance between unskilled and skilled labour is a result of a country’s educational and industrial history. A higher skilled labour force is created by government, by firms and by people themselves undertaking training and education.

• In other words, comparative advantage is dynamic not static, it changes over time and is influenced by policy. Comparative advantage, in some ways, can be “created.”
1.4 Dynamic Comparative Advantage

• As Stiglitz (2012) argues ‘Forty years ago, South Korea had a comparative advantage in growing rice. Had it stuck to that strength, it would not be the industrial giant that it is today. It might be the world’s most efficient rice grower, but it would still be poor.’

• Developing countries producing agricultural products based on static comparative advantage may remain poor as the terms of trade (Px/Pm) tend to deteriorate when output increases or demand decreases.

• The growth experience of Japan, the Four Little Dragon, except Hong Kong, and China indicates how governments can adopt appropriate developmental policies to boost industrialization and economic growth. These policies include ‘infant industry’ protection, import substitution, export-orientation, subsidization of R&D, enhancement of human capital.
2. Hong Kong’s Trade Pattern and Comparative Advantage

Table 1 Hong Kong’s External Trade 2014 (HK$ million)

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic Exports of Goods</td>
<td>55,283</td>
</tr>
<tr>
<td>Re-exports of Goods</td>
<td>3,617,468</td>
</tr>
<tr>
<td>Total Exports of Goods</td>
<td>3,672,751</td>
</tr>
<tr>
<td>Imports of Goods</td>
<td>4,219,046</td>
</tr>
<tr>
<td>Net Exports of Goods</td>
<td>-546,295</td>
</tr>
<tr>
<td>Exports of Services</td>
<td>826,995</td>
</tr>
<tr>
<td>Imports of Services</td>
<td>573,431</td>
</tr>
<tr>
<td>Net Exports of Services</td>
<td>253,514</td>
</tr>
<tr>
<td>Net Exports of Goods and Services</td>
<td>-292,781</td>
</tr>
</tbody>
</table>

## Table 2 Exports, Imports and Net Exports of Services 2014

<table>
<thead>
<tr>
<th>Service Sector</th>
<th>Exports of Services</th>
<th></th>
<th>Imports of Services</th>
<th></th>
<th>Net Exports of Services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HK$ million</td>
<td>Share (%)</td>
<td>HK$ million</td>
<td>Share (%)</td>
<td>HK$ million</td>
</tr>
<tr>
<td>Manufacturing services</td>
<td>--</td>
<td>--</td>
<td>92,426</td>
<td>16.1</td>
<td>-92,426</td>
</tr>
<tr>
<td>Maintenance and repair services</td>
<td>2,488</td>
<td>0.3</td>
<td>872</td>
<td>0.2</td>
<td>1,616</td>
</tr>
<tr>
<td>Transport</td>
<td>247,707</td>
<td>30.0</td>
<td>142,620</td>
<td>24.9</td>
<td>105,087</td>
</tr>
<tr>
<td>Travel</td>
<td>297,567</td>
<td>36.0</td>
<td>170,627</td>
<td>29.8</td>
<td>126,895</td>
</tr>
<tr>
<td>Construction</td>
<td>2,818</td>
<td>0.3</td>
<td>2,690</td>
<td>0.5</td>
<td>128</td>
</tr>
<tr>
<td>Insurance and pension services</td>
<td>9,374</td>
<td>1.1</td>
<td>11,200</td>
<td>2.0</td>
<td>-1,826</td>
</tr>
<tr>
<td>Financial services</td>
<td>134,910</td>
<td>16.3</td>
<td>34,380</td>
<td>6.0</td>
<td>100,530</td>
</tr>
<tr>
<td>Telecommunication, computer and information services</td>
<td>21,873</td>
<td>2.6</td>
<td>14,752</td>
<td>2.6</td>
<td>7,121</td>
</tr>
<tr>
<td>Other business services</td>
<td>102,751</td>
<td>12.4</td>
<td>86,808</td>
<td>15.1</td>
<td>15,943</td>
</tr>
<tr>
<td>Personal, cultural and recreational services</td>
<td>2003</td>
<td>0.2</td>
<td>776</td>
<td>0.1</td>
<td>1,227</td>
</tr>
<tr>
<td>Government goods and services</td>
<td>676</td>
<td>0.1</td>
<td>1,205</td>
<td>0.2</td>
<td>-529</td>
</tr>
</tbody>
</table>

Source: Hong Kong Census and Statistics Department, Hong Kong Special Administrative Region, Available at: [http://www.censtatd.gov.hk/hkstat/sub/sp240.jsp?tableID=082&ID=0&productType=8](http://www.censtatd.gov.hk/hkstat/sub/sp240.jsp?tableID=082&ID=0&productType=8) (Accessed on 8 May 2016)
### Table 3 Percentage Contribution of Economic Activities to GDP by Economic Activity at Current Prices

<table>
<thead>
<tr>
<th>Economic Activity</th>
<th>2009</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, fishing, mining and quarrying</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>1.8</td>
<td>1.4</td>
</tr>
<tr>
<td>Electricity, gas and water supply, and waste management</td>
<td>2.2</td>
<td>1.7</td>
</tr>
<tr>
<td>Construction</td>
<td>3.2</td>
<td>4.0</td>
</tr>
<tr>
<td>Services</td>
<td>92.7</td>
<td>92.9</td>
</tr>
<tr>
<td>Import/export, wholesale and retail trades</td>
<td>23.4</td>
<td>25.0</td>
</tr>
<tr>
<td>Accommodation and food services</td>
<td>3.1</td>
<td>3.6</td>
</tr>
<tr>
<td>Transportation, storage, postal and courier services</td>
<td>16.2</td>
<td>16.5</td>
</tr>
<tr>
<td>Information and communications</td>
<td>3.0</td>
<td>3.6</td>
</tr>
<tr>
<td>Financing and insurance</td>
<td>16.2</td>
<td>16.5</td>
</tr>
<tr>
<td>Real estate, professional and business services</td>
<td>11.0</td>
<td>10.8</td>
</tr>
<tr>
<td>Public administration, social and personal services</td>
<td>18.2</td>
<td>17.0</td>
</tr>
<tr>
<td>Ownership of premises</td>
<td>11.5</td>
<td>10.4</td>
</tr>
</tbody>
</table>

• Table 1 illustrates that Hong Kong’s domestic exports shared only 1.5% of Hong Kong’s total exports while re-exports shared 98.5% in 2014. These figures likely indicate that Hong Kong does not have a comparative advantage in producing manufactured goods domestically. Instead, it demonstrates that Hong Kong is comparatively good at providing services, in particular re-export services.

• Table 2 further reveals that transport, travel, financial and business services are the main exports of services, which amounted to 94.7% of Hong Kong’s total exports of services in 2014.

• Figures in Table 3 correspond to those in Table 2, indicating that service sectors are the main contributing components (92.9%) to Hong Kong’s GDP. Among service sectors, import/export, wholesale and retail trades, transportation, storage, postal and courier services, financing and insurance, public administration, social and personal services are the main cornerstones, which constituted 75% GDP in 2013.
• Kowalski (2011) uses data of 55 OECD and selected emerging market (SEM) economies, including Hong Kong, to investigate the correlation between trade pattern and comparative advantage. Empirical results show that comparative advantage remains an important determinant of trade and that it has changed over time (i.e. dynamic), including as a result of changing policies and institutions.

• For example, an increase in primary energy supply-to-GDP ratio has been found to boost exports in relatively energy-intensive sectors. Similarly, availability of credit has been found to boost exports more in sectors with higher dependence on external financing. These findings confirm the validity of H-O Model.
• Further, the high explanatory power of physical or human capital revealed by the results underscores the significance of policies that influenced the pace and quality of physical and human capital accumulation. It indicates that comparative advantage is dynamic, but not static.

• Taken together, the results underscore the importance of a comprehensive approach to designing economic development policies, which should seek consistency between trade and other policy objectives. Governments should avoid actively affecting trade patterns in general as such actions may be particularly counterproductive if they are inconsistent with country ‘s resource base and other policies in place.
3. Where Should Hong Kong Head for?

• Taking into account Hong Kong’s factor, talent and institutional endowment, Hong Kong should strengthen and further develop the following three sectors, through which Hong Kong can sustain and diversify its exports of services.
3.1 High Value-added Financial Services

• Hong Kong has one of the highest concentration of banking institutions in the world. Approximately 70 of the largest 100 banks in the world have an operation in Hong Kong.

• Hong Kong ranked third in the Global Financial Centres Index (GFCI) released by the Z/Yen Group in September 2015, after London and New York.

• Hong Kong is widely recognized as the leading fund management centre in Asia with a large concentration of international fund managers. As of end-2014, Hong Kong’s combined fund management business amounted to US$2.27 trillion (up 10.5% over 2013) while assets under management under private banking totalled US$397 billion.
3.1 High Value-added Financial Services

- Hong Kong has one of the world's **most active and liquid securities markets**. There is neither control over capital movements nor capital gains or dividend income tax. Hong Kong’s stock market was the third largest in Asia and sixth largest in the world in terms of market capitalisation in July 2015.

- There were 1,808 companies listed on the Hong Kong Exchanges (HKEx) as of July 2015, with a total market capitalisation of more than US$ 3.4 trillion. Hong Kong is one of the world’s most active markets for initial public offerings (IPO), with US$18.6 billion raised in the first seven months of 2015.

- Hong Kong has arisen as a **premier offshore Renminbi (RMB) centre**, thanks especially to the scheme for trade settlements in RMB and related financing activities.
3.1 High Value-added Financial Services

• In 2014, RMB trade settlement handled by banks in Hong Kong amounted to RMB6.3 trillion, a year-on-year growth of more than 60% over the year-earlier period.

• Besides, Hong Kong holds the largest pool of RMB liquidity outside the Chinese mainland. RMB deposits excluding RMB certificates of deposits totalled RMB854 billion as of end-October 2015, more than tenfold the level seen when the pilot RMB cross border trade settlement scheme was implemented in July 2009.

• Putting together Hong Kong’s strength in financial services, Hong Kong should strengthen its role as (1) global banking hub, particularly providing banking and syndicate loans to Belt and Road Initiative (BRI); (2) Asian wealth management centre; (3) global IPO centre and (4) a leading RMB offshore settlement centre.
3.2 Medical Tourism

3.2.1 Background of Medical Tourism

• Figures in 2013 showed that the US spent US$2.6 trillion a year on health care - 17.6 per cent of its gross domestic product, or US$8,233 per capita. Other developed countries typically spent about 9-11 per cent of GDP.

• Rising income and population aging in Asia boost growing demand for medical tourism, which is estimated to be worth US$100 billion a year in 2015.
3.2.1 Background of Medical Tourism

• India, Malaysia, Singapore and Thailand have been developing medical tourism at rapid pace with competitive prices. The OECD showed that many common medical operations cost as little as 10 per cent to 25 per cent of US prices in India, Thailand, Singapore, Mexico and Poland.

• Medical tourism entails strong linkage effects, stimulating demand for various sectors other than medical services.
3.2.2 Competitive Advantages of Hong Kong as a Regional Medical Hub

- World-class medical expertise and facilities – Life expectancy at birth 81.2 years for mail and 87.3 for female years in 2015.

- Efficient transportation network – easy access by medical tourists around the world. Ranked number one by World Economic Forum in terms of infrastructure quality among 144 economies.

- A global financial centre – fund raising for medical tourism

- Cultural affinity for mainland and Asian medical tourists
3.2.3 Hurdles of Developing Medical Tourism in Hong Kong

• Lack of marketing

• Lack of government support/plan

• Hong Kong has 1.9 medical practitioners per thousand population in 2015. In Britain, there were 3.7 (2014), in the United States, 3.3 (2013), in Japan, 2.3 (2012), in Korea, 2.6 (2013), in Malaysia, 1.0 (2013), and in Singapore, 3.0 (2014) doctors per thousand population.

• High medical costs
3.3 Regional Education Hub

• In 2014-15, 436,585 overseas students studied in the UK’s higher education (HE) sector, which was equal to 19.3% of the UK’s total number of students in HE. With every student spending HK$1 million for a HE degree, exporting education brings the UK HK$436.5 billion, which is about 3.2 times of Hong Kong’s exports of financial services.
Table 4: Place of Origin of Students in Hong Kong’s UGC-funded Universities (2014–15)

<table>
<thead>
<tr>
<th>Place of origin of students</th>
<th>Number of students</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local</td>
<td>81,759</td>
<td>84.36</td>
</tr>
<tr>
<td>China</td>
<td>11,610</td>
<td>11.98</td>
</tr>
<tr>
<td>Others</td>
<td>3,542</td>
<td>3.65</td>
</tr>
<tr>
<td>Total</td>
<td>96,911</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 4 shows that 11.98% in Hong Kong’s UGC-funded universities came from mainland and only 3.65% came from Asian and other countries.

3.3 Regional Education Hub

• Actually, Hong Kong is one of cities having a high concentration of top-100 universities in Asia and in the world. According to QS World University Rankings 2015/16, HKUST and HKU are ranked 5th and 6th in Asia. HKU, CUHK and HKUST are ranked 45, 74 and 77 respectively by Times Higher Education in 2016.

• Since income elasticity of education tends to be larger than one, rising household income in Asia will sustain the demand for quality higher education.

• Hong Kong needs to internationalize its campuses by recruiting more students and professors overseas, and develop branch campuses with reputable universities in the world. More private universities, local or overseas, can be established.
3.3 Regional Education Hub

- Singapore can be a model for Hong Kong’s development as a regional education hub. Singapore offers a wide variety of quality universities ranging from local to international. Apart from the four local universities - the National University of Singapore (NUS), Nanyang Technological University (NTU), Singapore Management University (SMU) and Singapore University of Technology and Design (SUTD), nine leading international institutions have established an Asian campus in Singapore.

- Singapore universities have also collaborated and offer joint programs with 29 high-calibre international universities such as The Wharton School of the University of Pennsylvania, Massachusetts Institute of Technology (MIT) and New York University School of Law.
4. What should the Hong Kong Government do?

• Enhancing human capital – variety of universities and tertiary institutes
• Attracting FDI
• Maintaining a sound legal system
• Augmenting R&D – focusing on applied research (e.g. genetic engineering, fintech)
• Playing a strategic role in BRI development
• Maintaining socio-political stability – vital for foreign investment
• “Creating” comparative advantage, but not deviating from Hong Kong’s factors endowment.
References:


Shaffer, L. (2015) ‘This is where the rich people are,’ Available at: http://www.cnbc.com/2015/09/16/ (Accessed on 9 May 2016)


Thank you!