Hong Kong’s Economic Integration with the Pearl River Delta: Quantifying the Benefits and Costs
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Executive Summary
Since the opening of China in 1979, Hong Kong has been transformed from a low value-added manufacturing center to a higher value-added service hub of an industrialized PRD through outsourcing. Outsourcing generates gains by reallocating resources from lower value-added to higher value-added uses. Besides reallocative effects, integration with the PRD may also affect technical change and innovation and thereby affect long run economic growth.

Allocative effects due to outsourcing can largely be quantified as the income and employment generated by PRD-related exports of goods and services. Such effects will be analysed in detail. Growth effects are much more difficult to quantify, and the analysis will be more qualitative.

Conceptual issues
A complete and accurate identification of the benefits and costs of Hong Kong’s integration with the PRD is impossible for the simple reason that history is not subject to experimentation: We cannot know with precision what would have happened if China had not opened to the outside world in 1979.

It is nevertheless possible to make educated guesses about Hong Kong’s development without China’s opening. As Hong Kong already had the highest costs among the Asian “four dragons” in the 1970s, Hong Kong’s labour intensive manufacturing industries would be phased out. The few big manufacturing firms in Hong Kong would likely relocate to Southeast Asia. The vast majority of small manufacturing firms would go bankrupt, as they lack the ability to operate internationally. However, the opening of the Mainland allowed Hong Kong’s small manufacturing firms to build a “global factory” in the PRD, generating huge opportunities for supporting services in Hong Kong.

Unlike relocation to the PRD, relocation to Southeast Asia would not generate many service jobs in Hong Kong. It is difficult for Hong Kong to increase its services exports to other regions as the demand for services tend to be price-inelastic and location-specific. Developing high-tech manufacturing is also difficult as Hong Kong had the lowest level of educational attainment among the “four dragons”. Moreover,

1 Transportation, travel, & trade-related services accounted for 84% of Hong Kong’s services exports in 2002, and the demand for such services tend to be location specific. While the demand for financial services may be more price elastic, such services were only 5% of Hong Kong’s services exports in 2002. The world market for services is riddled with barriers and regulations.
Hong Kong does not have the first mover advantage as it is the last to develop technology among the Asian four. Without China’s opening, Hong Kong would lose most of its labour intensive manufacturing without large gains in the service sector or in high-tech industries.

**Outsourcing**

This study distinguishes two phases of outsourcing. The first phase from 1979 to 1996 mainly involves the outsourcing of manufacturing, while the second phase, going from 1996 onwards, involves the outsourcing of services in addition to manufacturing.

In phase I, Hong Kong had a *temporary monopoly* as the service hub of China because Mainland’s services were extremely underdeveloped. Foreign investment in services was only gradually liberalized after Deng Xiaoping’s 1992 southern tour, and competition from Mainland’s service providers, e.g., the port of Yantian, did not become significant till around 1996. In phase II, Hong Kong’s temporary monopoly was rapidly eroded.

In phase I, Hong Kong investment created a large industrial base in the PRD, which depended on Hong Kong for services. Since Hong Kong had a temporary monopoly as a service hub, so many new jobs were created in the tertiary sector that a low unemployment rate was maintained despite very severe job loss in manufacturing due to outsourcing.

In phase II, job loss due to outsourcing was less severe because the more footloose operations had already relocated in phase I. However, employment creation in the tertiary sector was much less rapid, partly because of unfavourable external macroeconomic conditions, and partly because Hong Kong has lost its temporary monopoly as a service hub. The process of integration is no longer so smooth, and there was a rise in the rate of unemployment.

However, in a globalized economy, Hong Kong’s low-end backroom service would relocate even without the PRD. For instance, banks in Hong Kong have relocated their software support, data processing, and accounting to India, Southeast Asia, or Australia. For services that cannot relocate far away, the “neighbourhood” effect of the PRD may be significant. The best example is perhaps the consumption of Hong Kong residents in Shenzhen. However, the “neighbourhood” effect does not appear to be large: The consumption expenditure of Hong Kong residents in Shenzhen has declined since 2000, and was only 0.46% of Hong Kong’s GDP or 0.82 percent of Hong Kong’s private consumption expenditure in 2002. As will be seen below, Hong Kong’s unemployment rate would be much higher were it not for the large number of jobs generated through integration with the PRD.

**Challenge of Mainland’s Rapid Development**
With the rapid development of the Mainland, Hong Kong is bound to lose its temporary monopoly. Had Hong Kong adopted an isolationist strategy in response to Mainland’s opening, Shenzhen’s ports would be built with the help of other investors instead of Hong Kong investors. Hong Kong would lose its temporary monopoly and also lose the opportunity to share in the rapid growth of the PRD. The rapid development of the Mainland implies more business opportunities and a bigger cake for all. Given the challenge of Mainland’s very rapid development, the only viable strategy for Hong Kong is to upgrade its skills and quality of services, and also promote integration with the PRD to share in its growth. This strategy will enable Hong Kong to find many higher value-added activities to replace the old ones.

In recent years, while Hong Kong has been able to find some higher value-added activities in recent years, it has not found enough of them to maintain economic prosperity and full employment. The new business opportunities Hong Kong found in recent years were largely related to the PRD. From 1995-2002, the average annual rate of growth of Hong Kong’s total exports was only 1.8 percent, but that of Hong Kong’s PRD-related exports (which include domestic exports to the PRD, services exports to the PRD, re-exports to the PRD, re-exports of PRD-origin, and merchanting of PRD goods to other markets) was 7.3 percent. If PRD-related exports did not grow from 1995-2002, Hong Kong’s total exports would decline by 7 percent instead of growing by 13 percent. To capture more opportunities in Mainland’s rapid growth, Hong Kong should strengthen its integration with the PRD, and also redouble its efforts to upgrade skills and service quality.

**Trade in goods and services with the Mainland**

Hong Kong’s investments in the Mainland/PRD have generated huge trade flows. Hong Kong enjoys very favourable balances in its trade with the Mainland and also with the PRD. In commodity trade, over 90% of Hong Kong’s imports from the Mainland are not genuine imports into Hong Kong as they are re-exported elsewhere. Such imports in fact represent Hong Kong’s exports of entrepot services. In 2002, Hong Kong’s Mainland-related exports of goods and entrepot services were $301.5 billion. Hong Kong’s retained imports (i.e. imports retained for internal use) from the Mainland were only $45 billion, or around one-seventh of Hong Kong’s exports of Mainland-related exports of goods and entrepot services.

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2 In this study, re-exports are measured by their net value (i.e., value of entrepot services embodied in re-exports) instead of gross value. This is because the rate of re-export margin of re-exports is quite low (19% in 2002), with the result that the gross value of re-exports tends to overstate their importance.

3 Trading of goods which are purchased from and then sold to parties outside Hong Kong without the goods ever entering or leaving Hong Kong. Merchanting is part of Hong’s Kong’s offshore trade, i.e., trade conducted by Hong Kong firms that does not touch Hong Kong.

4 Composed of domestic exports to the Mainland of $41.4 billion, and exports of Mainland-related entrepot services of $260.1 billion
Hong Kong has enjoyed a surplus in its services trade with the Mainland since 1998. Hong Kong’s usual deficit in travel services (tourism) turned into a surplus in early 2003 due to the abolition of the quota on group tours to Hong Kong. The surplus surged in late 2003 due to the promulgation of individual tours. Hong Kong enjoys surpluses in all the major items of services trade, namely, transportation, trade-related services, and tourism.

**Summary of benefits and costs**

The analysis of reallocative effects and growth effects are summarized below.

**Reallocative effects**

Reallocative effects can be largely quantified as the income and employment generated by Hong Kong’s PRD-related exports. PRD-related exports have grown rapidly and are very large. It must be stressed that the bulk of PRD-related exports are destined for the world market. Conceptually, the benefits generated by such exports should be attributed to the world market (demand side) as well as the PRD (supply side). There is no analytically neat way to disentangle the contributions of demand and supply as both are necessary in any economic transaction. This study nevertheless focuses on the supply side for practical reasons. As the world market is very large relative to the HK-PRD nexus, it can easily absorb more exports from HK-PRD. The constraint to expanding exports in HK-PRD is on the supply side rather than on the demand side. In terms of policy, there is not much the government can do about the world market, while there is a lot that the government can do to expand the supply capacity of the HK-PRD nexus, e.g., by promoting integration. This study takes the world market as given, and attribute the income generated from Hong Kong’s PRD-related exports to integration with the PRD.

This study uses input-output analysis to quantify the income and employment generated by PRD-related exports. Figures quoted below refer to direct and indirect income/employment generated, i.e., direct effects plus indirect effects arising from other industries supporting PRD-related exports.5

**Benefits:**

- Income generated by PRD-related exports accounted for 16.6% of Hong Kong’s GDP in 1995, rising to 24.8% in 2002. The increase in income generated by PRD-related exports from 1995 to 2002 accounted for nearly 76% of the growth of GDP in the period.
- Employment generated by PRD-related exports accounted for 16% of Hong

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5 Induced effects, which arise from consumption induced by increase in income, are also computed, but they are not emphasized. The income/employment generated by PRD-related exports should be discounted to arrive at true benefits because the resources used in PRD-related exports have alternative uses. As mentioned before, without China’s opening, Hong Kong’s gains in high-tech industries or services are unlikely to be large. The discount is thus not large. As total effects are roughly two-thirds
Kong’s employment in 1995, rising to 23% in 2002. The increase in employment generated by PRD-related exports from 1995 to 2002 accounted for 85% of the growth of employment in the period.

- Though the income and employment generated by PRD-related exports have grown rapidly by 74% and 59% respectively from 1995 to 2002, future prospects of growth are uncertain because Hong Kong’s PRD-related entrepot services, which accounted for close to 60% of PRD-related exports, are expected to grow slowly or even decline because cargo diversion to Shenzhen ports will slowdown the growth of PRD-related entrepot trade. Moreover, Hong Kong’s rate of re-export margin is likely to decline as the PRD will be able to supply producer services locally instead of importing from Hong Kong. While exports of travel services (incoming tourism) are likely to grow rapidly, they were only 6.4% of Hong Kong’s PRD-related exports in 2002. Very rapid growth in travel services is required to offset a possible decline in entrepot services.

**Costs:**

- Specialization in PRD-related exports, composed mainly of entrepot services and services exports, may lead to instability in export earnings. However, there is no evidence that this is the case. In fact, service exports have been more stable than domestic exports.

- Integration has led to rapid structural change, leading to frictional unemployment. Hong Kong’s natural rate of unemployment may have risen by around one percent, from 2-3% in the early 1990s to 3-4% in the late 1990s.

**Long run growth effects**

Long run growth effects are important, but very difficult to quantify.

- Hong Kong’s direct investment in the Mainland raises the return to capital in Hong Kong and thus stimulates investment in Hong Kong. A previous study estimated that it would raise Hong Kong’s growth rate by around 1.5% (Sung and Wong 2000: 217).

- Integration stimulates growth by providing more opportunities of learning-by-doing. As Hong Kong firms expand across the border, they operate on a larger scale; enter new markets or product lines, and they have more opportunities to learn.

- Some of Hong Kong’s well-known firms grew large to become competitive, world-class players in the 1980s and 1990s through expansion in the China market and rapid growth in Hong Kong as a result of the prosperity generated by the China factor. Hong Kong has the world’s biggest and most globalized Chinese companies, and this is important for long run growth.

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of induced inclusive effects, this study effectively discounts the benefits generated by one-third.
- The synergy of the R & D capacity of the PRD with the capabilities of Hong Kong in high-tech finance and high-end services is a big plus for long term growth.

- Hong Kong residents have a large number of spouses and children in the PRD. Immigration of these children into the Hong Kong rejuvenates Hong Kong’s aging population, which is very positive for long term growth.

- Adult immigrants from the Mainland have an adverse impact on the skill level. A previous study estimated that the immigration of low-skilled mainlanders lowered the growth rate of Hong Kong in the mid 1990s by nearly one percent per year (Sung and Wong, 2000: 221). However, immigrants have stronger incentives to work and learn than local workers. Past experience indicates that they can be smoothly assimilated in the long run.

- In terms of policy, it is easier to correct for skill deficits than to induce more births to rejuvenate an aging population. On the net, the availability of cross-border marriages is a big asset for Hong Kong.

**Interactions in selected markets**

*The financial market:*

- “Red-Chips” and H-shares are important in Hong Kong’s stock market. They constituted around 27% of the market capitalization of the Hong Kong stock market in 2002. However, Guangdong-affiliated enterprises constituted less than 1% of the market capitalization in Hong Kong. Most of the big China-affiliated enterprises are state-level enterprises rather than regional enterprises.

- Interactions in the financial markets are related to the Mainland as a whole rather than Guangdong because Mainland’s financial policies are national rather than regional. For instance, the prospect of conducting offshore *Renminbi* business in Hong Kong is related to national rather than regional policy, though Guangdong will be important in the market as nearly half of Hong Kong’s outward External Direct Investment in the Mainland is in Guangdong.

*The Labour Market:*

- Most of the pertinent issues have been summarized in the government’s *Report of the Task Force on Population Policy*. New arrivals contributed to around 30% of the growth of the labour force between end-1999 and end-2001.

- Many international and local studies found that the impact of immigrants on local wages is small. The impact is large only in the short run, and only when a large wave of immigration coincides with a severe recession. In the long run, the Hong Kong labour market has been able to absorb large numbers of immigrants without great difficulty (Lam and Liu, 1997:91).

*The Real Estate Market:*

- According to the government’s Thematic Household Survey, of the 5.3 million
persons age 18 and over in Hong Kong in mid 2001, 4% of them (212,100 persons) owned a total of 189,000 units of residential property in the Mainland, but only 0.8% of them (41,300 persons) had taken up residence in the Mainland. Another 3.2% of them (172,000 persons) intended to take up residence in the Mainland in the next ten years.

- Most of the residential units purchased by Hong Kong buyers are used as vacation homes. Such properties are not substitutes for residential property in Hong Kong.
- From 1997 to September 2003, the total amount of loans from banks in Hong Kong to purchase residential properties in the Mainland were $11 billion, which was only 1.3% of the amount of loans used to purchase residential properties in Hong Kong in the period. Given the relatively small amount of expenditure involved, the impacts on the Hong Kong market cannot be large.

Social issues

The many social problems of integration, namely illegal immigration, crime, and public health hazards, can be very costly, as evidenced by SARS. However, in a globalized world, the best strategy to tackle such problems is not isolation but deep integration. Pro-active cross-border cooperation is often the best way to deal with such problems.

Mainland-Hong Kong CEPA

With rapid economic development in the Mainland, Hong Kong will lose out in low-end entrepot services, especially trade-supporting services that are directly related to physical movement of cargo (e.g. shipping, trucking, warehousing), and Hong Kong has to look for opportunities in high-end niches such as logistics, financing, insurance, arbitration, company headquarter functions, and high quality personal services. Hong Kong has to face the challenge of rapid structural change in its service sector, and Hong Kong can only succeed if it maintains its lead in skills and service quality.

The CEPA helps Hong Kong to rise to the challenge of structural change in services as it gives preferential access for Hong Kong firms to Mainland’s services sector. The CEPA also strengthens Hong Kong’s position as the premier service hub of China and thereby stimulates overseas investment in Hong Kong.

In the short run, it is unlikely that CEPA will have large effects on PRD-related exports. While CEPA will benefit exports of financial services and other services, their 2002 shares in Hong Kong’s PRD-related exports were only 0.3% and 1.6% respectively. CEPA may slow down, but is unlikely to reverse, the rapid decline in manufacturing exports. It is also unlikely CEPA can reverse the very rapid cargo diversion from Hong Kong to Shenzhen, though it may slow the pace of diversion.

In the short run, the main benefits of CEPA is likely to be from increase in
overseas investment as it already has a significant impact on investors’ sentiment towards Hong Kong. In the long run, the effects of CEPA on PRD-related exports can be large. The share of services exports in PRD-related exports has risen rapidly from 1995 to 2002, and services exports may become the largest item in PRD-related exports with the help of CEPA.

**Tourism and Individual Tours**

It has been estimated that individual tours will bring an extra four million tourists. Assuming their per capita expenditure to be the same as the average Mainland tourists, individual tourists would generate income of $13.7 billion or 1.1% of the 2002 GDP. They would also generate 49,932 jobs or 1.5% of the 2002 employment.

Individual tours lower the transaction costs of business deals between Hong Kong and the Mainland, and their economic contribution go far beyond tourism. Like CEPA, individual tours improve access for Hong Kong services to the Mainland market. Individual tours also hasten and facilitate further opening and economic reforms of the Mainland.

**Conclusion**

The benefits of HK-PRD integration are huge for both Hong Kong and the PRD because Hong Kong is the business platform linking the global factory of the PRD to the world market. The bulk of Hong Kong’s PRD-related exports are destined for the world market. HK-PRD nexus should not be an inward-looking bloc.

As mentioned above, integration in phase I was extremely smooth and it was largely market-driven with little government direction. In phase II, Hong Kong’s monopoly as a service hub was rapidly eroded and there was a rise in unemployment. However, Hong Kong would lose most of its employment in labour-intensive operations even without the PRD. Hong Kong’s PRD-related exports generated over 740,000 jobs in 2002. Mechanical calculations indicate that, without such exports, Hong Kong’s unemployment rate in 2002 would be 28.6% instead of 7.3%!

As the PRD is one of the most dynamic regions of the rapidly growing Chinese economy, the potential benefits of integration for Hong Kong are huge. As integration involves border management, coordination of regional infrastructure, and regional division of labour, it cannot be left entirely to the market. Hong Kong has to manage the process of integration to maximize the benefits and minimize the costs.