

Session IV

The 26th Pacific Economic Community Seminar

Examining the Mid- and Long-Term Structural Unemployment in Asia-Pacific

Trade and Employment in Hong Kong

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December 2011

Overall Position of Hong Kong's Economy and Labour Market

Key Economic Activities for Employment and GDP

1. Throughout the period from 2000 to 2010, Hong Kong's economy has been strongly oriented toward the service sector. This orientation has strengthened over the past decade. For instance, in 2000, the service sector employed 82.7 percent of the labour force and produced 86.2 percent of GDP. In 2010, the service sector employed 87.3¹ percent of the labour force and produced 91.7 percent of GDP.
2. Further details of the composition of Hong Kong's GDP by economic activity can be found in Tables 1 and 2. A consistent trend is that the share of the service sector has gradually decreased, largely at the expense of the manufacturing and construction industry, both of which have declined in real terms. The contribution of electricity, gas, and water has increased in real terms, but not as quickly as the contribution of the service sector.
3. Within the service sector, the import and export trade has been a key source of economic growth. In 2000, imports and exports contributed 13.7 percent of GDP. By 2010, however, this share rose to 19.5 percent. Moreover, the contribution of the import and export sector doubled in real terms between 2000 and 2008. In 2009, due to the financial crisis, the import and export sector experienced a recession, but by 2010 the recovery was well underway.
4. Apart from the import and export sector, the finance sector has also been an important contributor to Hong Kong's economic growth over the past decade. Although the growth of the finance sector was not as

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1 Source: Quarterly Report of Employment and Vacancies Statistics - September 2010, Hong Kong Census and Statistics Department.



dramatic as the growth of the import and export sector, the contribution of the finance sector to GDP nevertheless increased by over 70 percent in real terms between 2000 and 2010, and the finance sector's share of GDP increased from 22.0 percent to 27.5 percent.

5. Where employment is concerned, a somewhat different picture emerges. Table 3 examines the employment share of the same sectors over time. A striking observation from Table 3 is that, despite the rapid growth of the import and export sector, this growth did not generally result in improved employment prospects for workers in the import and export trade. This segment of the service sector employed 33.9 percent of the labour force in 2000, but only 32.8 percent of the labour force in 2009. Or, put another way, though the labour force in Hong Kong grew by 9.0 percent between 2000 and 2009, employment in the import and export sector increased by only 5.5 percent—not even enough to keep pace with the overall growth rate of Hong Kong's labour force.

6. By contrast, employment has increased substantially in Hong Kong's financing, insurance, real estate and business services sector. It has already been observed that the finance sector has been an important source of economic growth for Hong Kong over the past decade. In Table 3, it can be further observed that the share of employment in this sector increased from 14.1 percent to 18.2 percent between 2000 and 2009. Since Hong Kong's labour force grew by 9 percent over this period, this implies that employment in the financing, insurance, real estate and business services sector increased by 40 percent over the same period.

7. From the preceding observations, it may be concluded that, though the finance sector and the import and export sector have been important sources of economic growth for Hong Kong, the finance sector has been much more important in terms of creating jobs and employment. Nevertheless, the import and export sector is still important in absolute terms. The import and export sector, combined with wholesale and retail trades and the restaurant and hotel sector, together employ one-third of Hong Kong's labour force.

Hong Kong's Position as a Net Exporter of Services

8. Hong Kong's economy relies to a significant extent on the territory's position as a net exporter of services. Over the period from 2000 to 2010, Hong Kong has sought to actively increase its exports of services, most

notably through the adoption and continued implementation of its Closer Economic Partnership Arrangement (CEPA) with China (2003), but also via bilateral free trade agreements with other countries (New Zealand in 2010; and talks with the European Free Trade Association are now underway). The results have been quite substantial. In 2000, net service exports contributed about 9.3% to GDP. By 2009, the contribution of net service exports to GDP more than doubled, to 19.9%.

9. One of the implications of Hong Kong's shift toward a service-based economy is that Hong Kong has become increasingly reliant on imports of manufactured goods, especially from China (which make up 46.4 percent of the total). The next two most important sources of imported manufactured goods are Japan and Taiwan, which account for 10.3 percent and 7.5 percent of the total, respectively². Of these, the vast majority are re-exported, with the remainder retained for local use.

10. Further information on Hong Kong's manufacturing trade flows is provided in Tables 4 and 5. Table 4 describes Hong Kong's goods and services balance in terms of real (2008) Hong Kong dollars, and Table 5 expresses the same quantities as percentages of GDP. It can be seen immediately that Hong Kong itself manufactures very little relative to its trade flows in manufactured goods. In 2009, manufacturing contributed about 2.3 percent to Hong Kong's GDP (see Table 2). At the same time, Hong Kong's imports of manufactured goods totalled 165.6 percent of GDP, while exports of manufactured goods totalled 152.8 percent of GDP (see Table 5). Consequently, the overwhelming majority of locally-consumed manufactured goods have been imported from elsewhere.

11. In real terms, this imbalance has been increasing. In 2000, the excess of imported manufactured goods over exported manufactured goods was 57 billion Hong Kong dollars (in real (2008) dollars—see Table 4). In 2003, the imbalance was 45.2 billion Hong Kong dollars, which is not that different in real terms (or 3.6 percent of GDP—see Table 5). However, in 2004—after the implementation of the CEPA with China—the excess increased to 75.5 billion Hong Kong dollars (5.6 percent of GDP). By 2009, it more than doubled to 207.8 billion Hong Kong dollars (12.8 percent of GDP). At this point, Hong Kong is almost entirely dependent on external markets to provide locally-consumed manufactured goods.

2 Source: WTO Trade Policy Review (Hong Kong, China), 2010.



12. Hong Kong's reliance on import markets for manufactured goods is complemented by its exports of services. Although Hong Kong has been a net exporter of services for quite some time, these net exports have increased substantially over the past decade. In 2000, Hong Kong's net exports of services amounted to 9.3 percent of GDP (see Table 5). By 2009, net exports of services amounted to 19.9 percent of GDP, and had nearly tripled in real terms (see Table 4).

13. Of particular interest is the increase in net exports of services provided by the finance industry. While net exports of the other categories of services have increased fairly steadily over time, net exports of financial services increased very rapidly after the implementation of the CEPA with China. Between 2000 and 2003, Hong Kong's net exports of financial services amounted to approximately 30 billion Hong Kong dollars (real 2008 dollars—see Table 4). But in 2004, net exports of financial services started to increase rapidly, eventually more than tripling to 98.4 billion Hong Kong dollars in 2007. In the wake of the financial crisis, these net exports have been declining, but the post-CEPA expansion is nevertheless quite remarkable.

14. On balance, Hong Kong is a net exporter of goods and services. As Table 5 indicates, Hong Kong's total net exports amounted to 4.5 percent of GDP in 2000, rose to 12.4 percent in 2005 and then fell to 7.2 percent of GDP in 2009. This is because, though Hong Kong's net exports of services have risen steadily, net imports of manufactured goods have increased fairly rapidly since 2005.

15. A consequence of Hong Kong's consistently positive net exports is that its net international investment position (IIP) has been rising. In 2000, Hong Kong's external financial assets exceeded its external financial liabilities by 1.7 trillion Hong Kong dollars (in current dollars), or 131 percent of GDP. In 2009, Hong Kong's net international investment position was 5.6 trillion Hong Kong dollars, or 342 percent of GDP³. By way of comparison, the net international investment position of mainland China was about 37 percent of GDP in 2009⁴, and that of the United States was about –20 percent of GDP in 2009⁵.

3 Source: Hong Kong Census and Statistics Department (<http://www.censtatd.gov.hk>).

4 Source: State Administration of Foreign Exchange (<http://www.safe.gov.cn>).

5 Source: U.S. Bureau of Economic Analysis (<http://www.bea.gov>).

Hong Kong's Service Exports and Employment

16. Given that the service sector accounts for the overwhelming share of employment in Hong Kong, and that net service exports make up one-fifth of Hong Kong's GDP, it may be concluded that employment in Hong Kong is underpinned to a significant extent by Hong Kong's access to export markets in services. Indeed, one-third of Hong Kong's labour force is employed in the wholesale, import and export trades, restaurant, and hotel sector, which is highly dependent on not just the free flow of goods and services but also tourists travelling in and out of the territory. Tourism in particular has been identified by the government as a "key industry" for future development; this segment employs 5.6 percent of the total labour force, while import and export trades employ a further 15.7 percent of the labour force⁶.

17. Beyond services that are directly incidental to tourism and the import and export of manufactured goods, Hong Kong is also a significant provider of business services within the region. Many of these services are complementary to manufacturing operations that may have once taken place in Hong Kong, but now are carried out in other jurisdictions. For instance, is not uncommon for a parent company in Hong Kong to use local staff for business support services (e.g. marketing, product design, materials sourcing, finance), even though the manufacturing itself is carried out across the border. Excluding finance, 11.9 percent of Hong Kong's labour force is engaged in providing such "professional and producer services," while the financial services sector itself employs a further 5.9 percent⁷.

18. Finally, Hong Kong is also an important provider of logistics services in the region (mostly freight transport and storage, but also postal and courier services). For the past decade (since 2001), the government has been actively involved in promoting Hong Kong as a logistics hub, by providing infrastructure (both physical and regulatory), marketing, and support for small and medium enterprises. This segment makes up 4.0 percent of Hong Kong's GDP and employs 5.9 percent of the labour force⁸. Both of these figures have remained relatively stable over the past ten years, indicating that Hong Kong has maintained the position that it enjoyed at the beginning of the decade.

6 Source: Hong Kong Census and Statistics Department (<http://www.censtatd.gov.hk>).

7 Ibid.

8 Ibid.



Trade Policy and Employment in Hong Kong

General Trade Policy Objectives

19. The objectives of Hong Kong's trade policy are to support multilateralism (i.e., a free, efficiently-functioning system of global trade); to uphold its rights and obligations under multilateral, regional, and bilateral agreements; and to secure access to overseas markets for its local exports, particularly in the area of services. With the notable exception of Hong Kong's view toward the desirability of regional and bilateral trade agreements, this policy position has remained essentially unchanged over time.

Preferential Trade Agreements

20. Before 2000, Hong Kong's trade policy placed primary emphasis on multilateral trade agreements. Hong Kong is an original member of the World Trade Organization (WTO), which was created in 1995. Despite that, up to 2000, Hong Kong was not a member of any regional preferential trade agreements, and its bilateral agreements were limited to technical issues, such as avoiding double taxation and arranging for air traffic control. The concern was that, if Hong Kong were to enter into bilateral and regional trade agreements, it would undermine the development of free trade at the global level.

21. In 2000, this stance was reviewed and Hong Kong decided to pursue bilateral trade agreements. Hong Kong's present position on the matter is that bilateral and regional trade agreements may facilitate global trade liberalization, provided that such agreements are consistent with the overall framework provided by the WTO. Hong Kong then pursued and agreed to Closer Economic Partnership Arrangements (CEPAs) with China and New Zealand.

22. The CEPA with China is by far the most comprehensive, influential and well-established CEPA to date. Though the original CEPA (proposed in 2001) with China was signed in June 2003, seven supplements with additional liberalizing measures have since been agreed, with the most recent being signed in May 2010. The CEPA with New Zealand (also proposed in 2001) was signed in March 2010 and came into effect in January 2011.

23. In January 2010, negotiations were initiated to establish a CEPA with the European Free Trade Association (consisting of Iceland, Liechtenstein, Norway and Switzerland). Hong Kong's total merchandise trade with the EFTA has been growing by approximately 12% per year for the past five years, most recently amounted to \$59.9 billion (in 2009; in Hong Kong dollars).⁹ These negotiations are still underway. However, if the negotiations are successful, the agreement would facilitate greater access to EFTA markets and markets in western Europe generally.

Scope of Hong Kong's Preferential Trade Agreements

24. In general, the CEPA with China aims to provide Hong Kong service suppliers with access to mainland China in advance of China's general commitments to WTO members. Therefore, the CEPA may be regarded as an effort by Hong Kong to achieve a "head start" in mainland China over its competitors in the WTO. Although Hong Kong had not imposed any restrictions on mainland service providers in its own market, it has agreed as part of CEPA that it will not impose such restrictions in areas in which Hong Kong firms have received privileged access to mainland China.

25. Where goods are concerned, the gains to Hong Kong from the CEPA with China have been fairly modest. The initial agreement, signed in June 2003, provided that zero tariffs would apply to 273 categories of goods traded between Hong Kong and China, with effect from January 2004.¹⁰ These categories represented 90% of Hong Kong's domestic exports. The gain is modest because Hong Kong's manufacturing base is quite small, and China's WTO obligations in any event would have required it to provide tariff-free access for these goods with effect from January 2006.

26. After numerous supplemental agreements, the list of covered goods has been steadily expanded over time, and presently only a small number of prohibited imports are ineligible for tariff-free access. In 2004, the export value of CEPA products originating in Hong Kong was \$1.1 billion (in current Hong Kong dollars), or 3.0 percent of total domestic exports to China. The export value of CEPA products originating in Hong Kong increased to \$5.4 billion by 2009, or 20.3 percent of total domestic exports to

⁹ Source: WTO Trade Policy Review (Hong Kong, China), 2010.

¹⁰ The 273 categories were listed in the agreement according to China's 2001 tariff codes. Under China's 2004 tariff codes, the number of categories expanded to 374.



China.¹¹ This figure reflects significant growth, but it is still small in comparison to Hong Kong's GDP, which was \$1622.2 billion in 2009.¹²

27. The goods-producing industries in Hong Kong that make the most frequent use of the preferential access to China under the CEPA are the food and beverage industry, the plastics industry, and the textiles industry. By export value, the largest shares are accounted for by pharmaceutical products, plastics, and textiles.

28. The CEPA with China is much more relevant to Hong Kong in the area of services. Initially, 18 service sectors were included, and the number has since been expanded to 44. In the liberalized sectors, Hong Kong has undertaken not to impose any new restriction on China's service suppliers, and China has undertaken to allow preferential access to its domestic market for Hong Kong's service suppliers. These commitments go beyond China's WTO commitments in that (a) some of the service areas in the CEPA are not included among China's WTO obligations and (b) the CEPA allows Hong Kong suppliers to set up wholly-owned subsidiaries in China for specified services, while China's WTO obligations allow China to insist that such subsidiaries be joint ventures with local firms.

29. In addition to these arrangements, the CEPA with China provides for mutual recognition of professional qualifications (facilitating, e.g., the practice of law or accounting) and in some cases lower capital requirements to establish an enterprise in China. The latter arrangement allows smaller enterprises in Hong Kong to establish a foothold in China's domestic market. The service areas that have benefited most actively from CEPA (in terms of certification as a "Hong Kong Service Supplier," which is necessary for Hong Kong suppliers to demonstrate eligibility for preferences under CEPA) are transport and logistics, distribution, advertising and air transport.

30. Business receipts by Hong Kong service suppliers due to the CEPA with China from businesses in China were \$1.6 billion in 2004 (in current Hong Kong dollars), rising to \$19.5 billion by 2008 but then falling to \$14.7 billion in 2009 after the financial crisis. A particularly large jump occurred between 2006 and 2007 (\$4.2 billion to \$18.3 billion), because in 2007 the number of service areas covered by

11 Source: WTO Trade Policy Review (Hong Kong, China), 2010.

12 Source: Hong Kong Census and Statistics Department (<http://www.censtatd.gov.hk>)

CEPA increased from 27 to 38. The object of adding these 11 industries, which had been included in the ASEAN-China Free Trade Agreement, was to put Hong Kong service suppliers on equal or better footing with their ASEAN counterparts.

31. Finally, Hong Kong's CEPA with New Zealand is relatively new. Hong Kong does not impose any tariff on imports from New Zealand and has undertaken not to impose any such tariff. New Zealand, for its part, has reduced its tariff on Hong Kong-produced goods to zero for 54 percent of the goods currently being exported from Hong Kong to New Zealand, with the tariffs on the remainder to be reduced to zero over the next six years. Hong Kong service suppliers also enjoy preferential access to New Zealand's services markets, most notably including logistics and maritime transport.

Preferential Trade Agreements and Employment

32. Overall, the fraction of Hong Kong's net service exports that can be directly attributed to the CEPA with China is small, but economically significant (4.5% of net service exports in 2009; or 1.0% of GDP in 2009). Since the employment share of the service sector in Hong Kong is very nearly the same as its share of GDP, one may regard the CEPA with China as supporting the employment of about 1% of the local labour force.

33. The approximate estimate above is supported by a follow-up analysis of the Hong Kong government on the effects of the CEPA with China on the local economy. In 2009-10, the Hong Kong Census and Statistics Department surveyed companies in Hong Kong (all companies certified as "Hong Kong Service Suppliers" under the CEPA, and a sample of 1804 non-certified companies, for a total of 3012 companies) to determine the extent to which such companies had set up operations in mainland China, revenues attributable to these operations and the number of jobs supported by these operations.¹³

34. According to the preceding survey, 44,983 people in were employed by Hong Kong companies due to CEPA in 2009. Of these, 40,558 were employed by the companies' mainland operations and 4425 were employed locally in Hong Kong. By comparison, the labour force in 2009 consisted of 3.7 million

¹³ See "The Mainland and Hong Kong Closer Economic Partnership Arrangement," LC Paper No. CB(1)2065/09-10(01), <http://www.legco.gov.hk/yr09-10/english/panels/ci/papers/cicb1-2065-1-e.pdf>.



people. Consequently, the number of jobs supported by the CEPA with China is indeed on the order of 1% of Hong Kong's labour force (as had been suggested by the volume of net service exports to China). However, 90% of these jobs are based in China. Consequently, the amount of job creation in Hong Kong that can be attributed to the CEPA with China is quite minimal.

35. Of the jobs based in China and attributed to CEPA, 48% are with freight forwarding; 20% are in distribution; 20% are in advertising and audiovisual services; 5% are in transport and logistics; and the remainder are in other service areas. Of these, about 30% are based in Guangdong province (the province immediately adjacent to Hong Kong) and the remainder are based elsewhere in China. The sector composition of jobs based in Hong Kong and attributed to China was not covered by the survey. However, the service area of distribution accounted for the great majority (83%) of business receipts by Hong Kong companies due to the CEPA with China.

Trade Adjustment and Inequality in Hong Kong

Competition and Structural Changes in Hong Kong's Economy

36. Prior to the 1980s, Hong Kong's economy was strongly oriented toward the manufacturing sector. Like many Asian countries, Hong Kong enjoyed a strong clothing and textiles industry in the 1960s; in the 1970s, the thriving textile industry was supplemented by the development of additional labour-intensive manufacturing industries (e.g. toys, watches, and electronics). At that time, Hong Kong's low-cost manufacturing industries had yet to face competition from Taiwan, South Korea and other Asian economies that would ultimately occupy this segment of the global market.

37. This favourable state of affairs was disturbed in the late 1970s and early 1980s for two reasons. First, other Asian economies in the region were entering the low-cost manufacturing segment, creating more competition for Hong Kong. Since Hong Kong has always subscribed to a principles of free trade, protectionism was not an option and local industries faced a difficult move up the value chain. However, unlike competitors in Asia, Hong Kong did not embrace more capital- or technology-intensive manufacturing, in part because labour and rental costs were relatively high.

38. The second reason is that, starting in the late 1970s, China's economy started to open up to the outside world. Before 1978, China traded primarily with the USSR and its satellite countries; there were no manufacturing links between Hong Kong and China to speak of.¹⁴ After China implemented its "open door" policy, however, Hong Kong enterprises rapidly relocated operations across the border. This response was somewhat different from that of Hong Kong's counterparts; where Taiwan, Japan and South Korea moved into more capital- and technology-intensive manufacturing, Hong Kong simply took advantage of the lower-cost labour force available in Shenzhen and Guangdong. In general, labour-intensive manufacturing operations migrated to mainland China, while managerial tasks, design, marketing, quality control, and other higher-level business functions stayed in Hong Kong.

39. Throughout the 1980s and 1990s, Hong Kong's economy underwent significant structural change as labour-intensive manufacturing operations continued to migrate to mainland China. By 1999, the manufacturing sector represented only 5.4% of Hong Kong's GDP. Despite this relatively low figure, however, the manufacturing sector still employed 11.4% of Hong Kong's labour force.¹⁵ Therefore, the relatively small contribution to GDP notwithstanding, Hong Kong's manufacturing sector was still an important source of employment opportunities for low-skilled workers.

40. By 2009, the manufacturing sector represented 2.3 percent of Hong Kong's GDP and employed 3.8 percent of the labour force.¹⁶ The disproportionate contribution of manufacturing to employment relative to GDP indicates that the manufacturing sector continues to be an important source of employment for low-skilled workers. Most of these workers are employed in the printing and publishing, clothing, food and beverage, or electronics industries. Nevertheless, a significant consequence of Hong Kong's increasingly service-oriented economy is that there are considerably fewer opportunities for low-skilled workers than there were a decade ago.

14 See Kristof, Nicholas D., "China: Hong Kong's Factory," *The New York Times*, 4 September 1987 (<http://www.nytimes.com/1987/09/04/business/china-hong-kong-s-factory.html>).

15 Source: Hong Kong Census and Statistics Department (<http://www.censtatd.gov.hk>).

16 Ibid.



Absorption of Workers by the Service Sector

41. Hong Kong's service sector has, for the most part, been able to absorb the low-skilled workers that would formerly have been employed in the manufacturing sector. These low-skilled workers are primarily concentrated in trades that, for the most part, cannot be outsourced across the border (e.g. restaurants and property management). Statistics for low-skilled workers (identified as workers earning HK\$24 per hour or less) are provided in Table 6. As of the second quarter of 2009, 4.7% of the working population earned HK\$24 or less per hour.¹⁷

42. Table 6 shows that the largest share of low-wage workers (36%) are employed in either estate management or security and cleaning services. The second-largest share are employed in restaurants, and the third-largest share are employed in retail stores. The other low-paying sectors, as identified by the Census and Statistics department, are elderly homes, laundry and dry cleaning services, hairdressing and other personal services, local courier services, and food processing and production. What these sectors all have in common is that they cannot be outsourced—they all involve providing various services to Hong Kong residents, and, with the notable exception of live-in domestic helpers, it is not possible to import workers to take up these tasks.

43. Table 6 also shows that low-wage workers make up a significant portion of the labour force within the low-wage sector. For instance, in the restaurant sector 15.4% of workers in the restaurant sector earned HK\$24 per hour or less; and in the property management sector, 22.0% of workers earned HK\$24 per hour or less. This circumstance may be viewed positively or negatively. The positive aspect is that the local service sector has been able to employ large numbers of low-skilled workers. However, this has occurred in a decidedly negative context, which is that, due to the relocation of labour-intensive manufacturing operations to China, the demand for low-skilled workers in Hong Kong is much less than it was. The consequence is that the market-clearing wage in the few segments of the economy that do continue to employ low-skilled workers has been driven to a very low level.

¹⁷ Ibid.

44. From the perspective of inequality, the structural change in Hong Kong's economy has not been a positive factor. Historically, inequality in Hong Kong has been trending up ever since China opened up to foreign trade and investment in the late 1970s.¹⁸ As a consequence, Hong Kong's inequality is now the highest among highly-developed economies; in 2007, the Gini coefficient is 0.434, and the poorest 10% of the population only received 2% of the total income.¹⁹

45. One may surmise that, though free trade has been a boon for higher-skilled workers (who now enjoy greater demand for their services from the global market), it has been quite negative for lower-skilled workers (who now compete with overwhelming supply from China). Given that there is no obvious source of potential demand for low-skilled workers, it seems unlikely that these circumstances will change in the near or medium term. Over the long term, the solution would depend on providing an adequate level of compulsory education, so that those with the lowest skill level could find opportunities beyond the sectors that are currently employing large numbers of low-wage workers.

Trade, Prices, and Inequality

46. Generally speaking, Hong Kong's free trade policy is only indirectly responsible for Hong Kong's periods of deflation and inflation over the past decade. For the most part, the changes in prices can be attributed to the property market, which accounted for more than half the overall trend in deflation,²⁰ and continues to be a major factor in the current inflationary trend.²¹ Nevertheless, workers in industries that have prospered under free trade may find that their wages keep up better with inflation, or are otherwise doing better in real terms when compared with workers in industries that are less competitive under free trade.

47. To gain perspective on the trends in wages and prices that have been faced by workers in Hong Kong (and particularly lower-skilled workers), Figure 1 graphs Hong Kong's CPI(A) measure of prices against the average nominal salaries of selected occupations over time. The CPI(A) measure is designed

18 Iakova, Dora. 2004. "Trends in Wage Inequality, 1981-2001." Hong Kong SAR: Meeting the Challenge of Integration with the Mainland. Washington, DC: International Monetary Fund.

19 Source: UN Human Development Report 2009.

20 Schellekens, Philip. 2003. "Deflation in Hong Kong SAR." IMF Working Paper WP/03/77.

21 Source: Hong Kong Census and Statistics Department (<http://www.censtatd.gov.hk>).



to be indicative of the consumption of Hong Kong residents with incomes between the 5th percentile and the 55th percentile (i.e. higher than the lowest 5 percent, but lower than the highest 45 percent). In 2010, this guideline corresponded to a range of nominal incomes between 4,400 and 17,300 Hong Kong dollars per month.²²

48. The occupations included in Figure 1 include those of relatively low-wage workers that, *a priori*, may be expected to be affected by trade in various ways. In particular, the accounting industry may benefit from greater opportunities in mainland China. However, workers in occupations that provide services to local residents (e.g. cleaners or waiters and waitresses) may do worse as these sectors absorb low-skilled workers from the manufacturing sector. On inspection, though the accounting industry may indeed have benefited from increased opportunities to provide services to firms in mainland China, these benefits do not seem to have accrued to relatively low-skilled workers in the industry, who faced essentially the same nominal wage trend as low-skilled workers in industries that do not export services.

49. Figure 1 also shows that, though deflation coincided with small declines in the nominal wages of low-skilled workers, the downward movement in nominal wages was for the most part quite limited. Unfortunately, however, this downward rigidity came with a price. As Figure 2 indicates, even though low-skilled workers' wages were rising in real terms through 2004, unemployment also increased sharply. The general unemployment rate in 2000 was 4.9 percent, rising to 7.9 percent by 2003. However, when inflation picked up (and wages started to fall in real terms), unemployment fell, reaching a low of 3.9 percent immediately before the global financial crisis.

50. The overall lesson from Figures 1 and 2 is the following. During times of inflation (i.e. from 2004 onward), the service sector was able to absorb large numbers of low-skilled workers, albeit at sharply lower real wages. During times of deflation, however, downward adjustment of nominal wages was quite limited, and unemployment increased. Finally, Hong Kong's adjustment to a more services-oriented economy does not seem to have aided one group of low-skilled workers at the expense of another, as workers in this group have generally faced the same nominal wage trend regardless of industry.

22 Source: Hong Kong Census and Statistics Department (<http://www.censtatd.gov.hk>).

51. For higher-skilled workers, a different picture emerges. To explore changes in wages for professional and managerial employees, Table 7 displays real wage indices for managers and professionals in several industries since 2004. Overall, real wages for managers and professionals increased by 5.1% since 2004 (148.2/141.0). However, these gains were not shared by professionals in the manufacturing sector (who experienced a 1.3% decline). Real wages for professionals in the import/export sector or wholesale and retail trade increased through 2007 (2.7% over the preceding three years); this corresponds to the greater volume of services provided by this sector through 2008 (see Table 1).

52. The managers and professionals that did the best of all, however, were in the finance and insurance sector. The wages for this group increased by an eye-opening 11.9% in real terms between 2004 and 2010; this is also in line with the greater volume of services provided by the financial sector through 2010 (see Table 1). Although the growth of both the import/export and trade sector and the finance and insurance sector was very comparable over the past decade, workers in the financial sector seem to have received more of the benefits than their counterparts in the import/export and trade sector.

53. Another way to examine the effects of trade on inequality is to examine trends in wages and inequality within specific sectors. To this end, Table 8 shows real monthly wages by industry over the past decade, and Table 9 shows the variance of log monthly wages over the past decade. From Table 8, one can see that exposure to trade is not necessarily bad for average wages. In the manufacturing sector, for instance, average real wages rose by 18%, notwithstanding the departure of many manufacturing jobs to mainland China. In the finance sector—which, in having the opportunity to provide services to a global market, was a significant beneficiary of Hong Kong's free trade policy—average real wages rose by 20%. Therefore, whether a sector as a whole does well or poorly under a free trade regime is not a very good predictor of how wages will evolve under a free trade regime. In Hong Kong, to be sure, many jobs were lost in manufacturing, and many jobs were gained in finance. The real wage trend in both sectors, however, was about the same.

54. An additional observation that one can make from Table 8 is that real wages in the transport, storage and communications sector were largely stagnant, increasing only 3.3% over the whole decade. The employment share of this sector also remained relatively constant over the past decade (see Table 3).



Therefore, there seems to be little correlation between real wages in a sector and whether employment in that sector is expanding or declining.

55. By examining Table 9, one can gain an idea of how trade may contribute to wage inequality. Generally speaking, wage inequality in Hong Kong has been rising over time; this trend is visible in every sector. Interestingly, however, inequality increased the fastest in the three sectors one might view as most affected by trade: the finance, insurance, real estate and business services sector; the manufacturing sector; and the wholesale, retail and import/export trades, restaurants and hotels sector (in that order). Of these, the first two also experienced very significant shifts in employment (see Table 3). These developments are consistent with the idea that exposure to the global market tends to increase the return to human capital, which in turn increases inequality. For instance, in the manufacturing sector, it might be that the unskilled jobs are leaving while the skilled jobs are remaining. This would lead to both higher average real wages and higher average inequality.

56. From these observations, one may broadly conclude that, among low-skilled workers in Hong Kong, trade-induced structural changes in the economy tended not to lead to wage differentials. This conclusion is fairly sensible because low-skilled workers do not have a great deal of industry-specific human capital and can fairly easily shift from one industry to another. Higher-skilled workers, however, tended to prosper when their industry did well (as in the case of the finance and insurance sector). Similarly, the wages of higher-skilled workers tended to stagnate when their industry did less well (as in the case of the manufacturing sector). Therefore, trade-induced structural changes in Hong Kong have tended to create inequality among higher-skilled workers, and generally by increasing the wages of higher-skilled workers relative to low-skilled workers.

Individual Wages in Trade-Affected Sectors: A Regression Analysis

57. The preceding analysis has largely focused on aggregate data. However, it is also valuable to examine micro-level outcomes of individual workers. This section presents the results of a regression analysis of the determination of Hong Kong workers' wages in various sectors. The data are from Hong Kong's General Household Survey (1999-2008), which collects data from a representative sample of

households in Hong Kong on a quarterly basis. In total, data are available on 249,374 workers in Hong Kong over the relevant time frame. The General Household Survey collects standard demographic data as well as information on respondents' occupations and earnings from main employment.

58. An issue that arises in the use of this particular data set is that the data on earnings from main employment are expressed in terms categories (i.e., an interval that contains the respondent's actual earnings). For this reason, the technique employed is censored regression analysis (i.e., with the parameters estimated by maximum likelihood) rather than traditional ordinary least squares analysis. However, as empirical wage distributions are generally approximated quite well by a lognormal distribution, this does not pose a particular problem for the analysis at hand.

59. More specifically, the object is to estimate a wage regression (log wages on a set of exogenous covariates, to be set out shortly) that includes indicator variables for whether a particular sector is "affected by trade" or not. While being "affected by trade" may relate to tariffs or other trade barriers in other contexts, this definition does not work well in Hong Kong's case because Hong Kong has long practiced a free trade policy and has imposed very few restrictions on imports and exports. In Hong Kong's case, the major exogenous trade-related factor affecting the labour market has been the increasing participation of mainland China in the world market. This, as noted earlier, has led to considerable structural change in Hong Kong's economy.

60. With this in mind, the indicator variables for how a sector has been "affected by trade" refer to whether or not the sector has expanded or contracted over the past decade. The first indicator variable is set equal to one if the sector's share of GDP has increased over the past ten years²³ and zero otherwise. The second indicator variable is set equal to one if the sector's share of employment has increased over the past ten years²⁴ and zero otherwise. Perhaps surprisingly, these two indicator variables are not as highly correlated as one might think ($\rho = -0.175$); this is because (a) the community, social and personal services sector created jobs while shrinking as a share of GDP, and (b) the wholesale, retail and import / export trades, restaurants and hotels sector increased its share of GDP while creating relatively few jobs. Therefore, while trade-related expansion can create jobs, it does not necessarily do so, and even sectors

23 These sectors are wholesale, retail and import / export trades, restaurants and hotels; transport, storage and communications; and financing, insurance, real estate and business services.

24 These sectors are transport, storage and communications; financing, insurance, real estate and business services; and community, social and personal services.



that are shrinking as a share of GDP can absorb labour (albeit at quite low wages).

61. The additional covariates in the wage regression are quite straightforward: age, age squared, an indicator variable for being female, an indicator variable for being married, an interaction term for being both female and married, and full sets of indicator variables for educational attainment and time (survey year). The results from the wage regression are set out in Table 10, for three cases: including the indicator variable for growth of GDP share, including the indicator variable for growth of employment share, and including both of these indicator variables.

62. The results in Table 10 are quite consistent with the analysis in preceding sections. The positive coefficient of 0.101 on the “growth of GDP share” variable in the last set of results indicates that, even after controlling for differences in workers’ characteristics, those who are fortunate enough to be employed in a quickly-growing sector earn about 10% more than those who do not. That this difference persists even when controlling for educational attainment and other factors shows that workers cannot easily shift from one sector to another. Because of this, trade-induced economic inequality can persist over time, and benefits enjoyed by one sector may be quite slow to flow through to other sectors.

63. The second major result in Table 10 is the negative coefficient on the “growth of employment share” variable. From the last set of results, one can see that workers in sectors that grew in terms of employment earned about 2% less than workers in sectors that did not. Consequently, the mere fact that a sector is adding jobs does not necessarily imply that workers in that sector are doing well. To the contrary, if the sector is merely absorbing large numbers of workers at a low wage—as is sometimes the case, in Hong Kong’s service sector—workers in that sector will not do very well at all. What we may conclude from this is that, though workers in sectors that grow faster than GDP also enjoy higher wages, this positive outcome does not always translate into more employment (and in Hong Kong’s case, outside of the financial sector, it generally did not).

Summary Comments on Trade Adjustment and Economic Inequality

64. The effects of trade on economic inequality in Hong Kong may be summarised as follows. A major consequence of Hong Kong's increasing orientation toward services has been the migration of low value-added manufacturing operations to mainland China. However, this also resulted in fewer opportunities for low-skilled workers in Hong Kong, with the consequence that many of these workers were absorbed into the service sector at very low wages. Since the sectors that employ the great majority of low-wage workers do not export services (except in limited amounts to tourists from other jurisdictions), Hong Kong's increasingly substantial net exports in services are unlikely to provide much support to this segment of the population.

Implications of Minimum Wage Legislation in Hong Kong Regulation of Hong Kong's Labour Market

65. Until recently, the regulation of employment in Hong Kong has been minimal, aimed at standardizing employment contracts, ensuring workplace safety, and prohibiting specific unacceptable practices (e.g. child labour, sex discrimination, race discrimination²⁵). These regulations did not materially impinge on either the price of labour or the ability of employers to hire and dismiss at will. Even in cases of unreasonable dismissal, damages are generally limited to the payment the employee would have received if proper notice had been given under the contract of employment. There are no restrictions on hours of work on working days and no requirements to pay overtime (though many employment contracts do make provision for overtime pay under certain conditions, employers are not required by statute to do so).

66. Similarly, the rights of workers in Hong Kong to have their interests represented by trade unions are very limited. While workers in Hong Kong have the right to join trade unions, the consent of the employer is required to engage in union activities during working hours, and in fact the employer need not recognize the trade union at all (i.e., workers, even when represented by a union, do not have collective bargaining rights). These circumstances effectively rule out any sort of industrial action, and the collective agreements that do exist are generally non-binding.

²⁵ The prohibition of race discrimination is relatively new to Hong Kong, having been implemented in 2009. As yet, no significant court cases have arisen to test the full impact of the legislation.



67. A major change to the regulation of Hong Kong's labour market arose in 2010, when Hong Kong enacted legislation to implement a statutory minimum wage. The legislation, modelled on the UK National Minimum Wage Act 1998, established a mechanism by which the government, advised by a commission, prescribes a binding statutory minimum wage from time to time. The government's proposal as to the level of the minimum wage may be accepted or rejected by the Legislative Council, but not amended. In this respect, the mechanism is unlike that of the United States, where the level of the minimum wage is set directly by the legislature.

68. Hong Kong's first statutory minimum wage of HK\$28 per hour is to take effect on 1 May 2011. As in the UK, the initial level was chosen to cover approximately 10 percent of the labour force. More specifically, the figure was chosen with reference to a survey carried out in the second quarter of 2009 by the Hong Kong Census and Statistics Department, which found that 9.7 percent of the labour force earned HK\$27 per hour or less. As nominal wages since then have increased by 2.7 percent for non-supervisory workers and below²⁶ (or to a current equivalent of HK\$27.73 through September 2010), the initial rate of HK\$28 per hour in May 2011 should also cover about 9.7 percent of the labour force.

Effects of the Statutory Minimum Wage on Hong Kong's Export Competitiveness

69. As a first step in assessing the likely effects of the statutory minimum wage on Hong Kong's export competitiveness, Table 11 displays the distribution, by sector, of workers who earned HK\$27 per hour or less in the second quarter of 2009. Although the statutory minimum wage to be implemented is actually HK\$28 per hour, HK\$27 per hour is chosen as a benchmark in order to take into account trends in nominal wages between when the survey data were collected and when the statutory minimum wage is to be implemented. Table 11 is similar in nature to Table 6, except that the wage cut-off point is somewhat higher. Put another way, Table 6 examines the 111,000 workers in the lowest 5% of the wage distribution, while Table 11 examines the 224,500 workers in the lowest 10% of the wage distribution.

26 Source: Hong Kong Census and Statistics Department (<http://www.censtatd.gov.hk>)

70. Table 11 indicates that the great majority of workers earning wages at or less than the statutory minimum wage are employed in sectors that do not export goods or services overseas. The retail sector, restaurant sector, estate management, security and cleaning sector, and other low-paying sectors (e.g. elderly homes, laundry and hairdressing services) are all chiefly concerned with providing services to local residents. The same can be said of the education, medical, and community and personal services sector. All together, 236,500 workers are employed in sectors that are, for the most part, closed to international trade. Since these sectors account for 87.6 percent of all workers earning HK\$27 or less in 2009, the effects of the statutory minimum wage on Hong Kong's export competitiveness are likely to be minimal.

71. Finally, it is sometimes suggested that the implementation of the statutory minimum wage in Hong Kong would accelerate the relocation of manufacturing operations to mainland China. This is unlikely for two reasons. First, even without a statutory minimum wage, the typical factory worker in Hong Kong (of those who remain) earns about three to four times as much as a typical factory worker across the border in Guangdong province. Consequently, the statutory minimum wage will not materially affect the relative prices of labour in Hong Kong and Guangdong. Second, the manufacturing sector in Hong Kong employs a relatively small proportion (7.1 percent) of workers who would be affected by the statutory minimum. Therefore, the effect of the statutory minimum wage on the total labour costs of Hong Kong manufacturers should be small.

Effects of the Statutory Minimum Wage on Employment

72. Although the statutory minimum wage has yet to be implemented in Hong Kong, it is possible to make a preliminary assessment of its effects by inspecting the statistics in Table 11. From Table 11, two key observations can be made. The first is that low-wage workers are concentrated among a relatively small number of sectors. For instance, the "low-paying sectors" employed 83.1 percent of workers earning HK\$27 or less in the second quarter of 2009. This does not compare favourably with the total employment share of these sectors, which was only 27.1 percent of Hong Kong's labour force.²⁷ This means that the burden of the new statutory requirement will fall strongly and disproportionately on a relatively small number of employers.

²⁷ Ibid.



73. The second observation that can be made from Table 11 is that many low-wage jobs in Hong Kong are either easily automated (security guards that can be replaced by closed-circuit television systems, or street sweepers that can be replaced by street-cleaning vehicles) or in industries where consumer demand is highly elastic (the restaurant sector). These observations suggest that the disemployment effects of the statutory minimum wage policy will be quite substantial.²⁸ Moreover, if the statutory minimum increases with inflation, it is unlikely that the mechanism described in para. 50 (where inflation allowed the service sector to absorb low-skilled workers by depressing real wages) would continue to operate.

74. Examining the low-paying sectors in Table 11 more specifically, one notes that a minimum wage of HK\$27 per hour in 2009 would have covered 28.3 percent of workers in the restaurant sector, 36.1 percent of workers in the supermarket and convenience store sector, and 46.2 percent of workers in the property management sector. Given the magnitude of the pay rises that would be necessary to maintain employment in these sectors at its current level, the elasticity of consumer demand in these sectors, and the relative ease of shifting to less labour-intensive production processes, a minimum wage at this level would be likely to create significant unemployment among low-skilled workers.

75. Finally, it is valuable to refer briefly to the experience of the United Kingdom in implementing a similar mechanism. As has been mentioned, the initial minimum wage in the UK was selected to target 10 percent of the labour force; the initial minimum wage in Hong Kong was selected by essentially the same criterion. The UK did not succeed initially; due to increases in nominal wages, the initial minimum wage in the UK only covered about 5 percent of the population. This being the case, the UK aggressively increased the statutory minimum in 2003 and 2004 (by 15 percent, though nominal wages increased by only 8 percent over those two years).

76. The immediate consequence of the UK's aggressive increases in the statutory minimum wage was significant unemployment in the retail and hospitality sectors.²⁹ Learning from the experience, the UK minimum wage commission recommended increases in later years that were lower than the forecast rate of increase in nominal earnings and continues to do so. This suggests that the 10 percent target was not

28 Anecdotal evidence suggests that such disemployment is already taking place. For instance, at the author's housing estate, the security guards (previously employed directly by the owners' association) have all been outsourced and replaced, and there are not quite as many as there were before.

29 Vere, James P. "The Right Sums." South China Morning Post, 16 June 2010.

particularly workable in the UK, and that Hong Kong's attempt to adopt a similar target does not bode particularly well. Of course, Hong Kong is not the UK, but as low-wage workers in Hong Kong are even more concentrated among a few sectors, the circumstances facing Hong Kong's low-wage workers in light of the minimum wage policy are even less favourable.

The 2008 Financial Crisis

Macroeconomic Effects of the Financial Crisis

77. As a global financial centre, Hong Kong's economy, like many others, was hard hit by the 2008 financial crisis. Nevertheless, Hong Kong was more fortunate than most. Unlike in the United States, mortgages in Hong Kong remained healthy, and local lenders were (and still are) well-capitalized. Though Hong Kong did suffer the effects of the global financial crisis, these effects were generally due to Hong Kong's exposure to global financial markets, and not due to intrinsic weaknesses in Hong Kong's own financial market.

78. These things said, Hong Kong did experience some confidence-related troubles during the onset of the financial crisis. Though the local banks turned out to be healthy, this was not known at the beginning; the stock prices of many plummeted along with those of other global banks, and local banks became wary of lending to one another (as evidenced by a sharp rise in Hong Kong's overnight interbank lending rate). Moreover, rumours circulated for several days that the Bank of East Asia—one of the five largest local banks—had become insolvent, leading depositors to withdraw more than 250 million USD in deposits over the course of two days.³⁰ The Hong Kong government addressed the confidence issue by offering a blanket guarantee of all local deposits. None of the local banks collapsed, and the guarantee, having served its purpose, expired at the end of 2010.

79. In addition, though Hong Kong's economy did not have structural problems per se, its exposure to the global financial crisis was substantial. In particular, the global financial crisis had the effect of not only reducing the demand for highly traded products, but also curtailing the financing of such trades. Consequently, global trade flows declined by 12.5% in 2009.³¹ Beyond this, the global financial crisis

30 "Storm Warning." *The Economist*, 6 October 2008.

31 OECD, 2010. "Trade and Economic Effects of Responses to the Financial Crisis."



also had the obvious effect of reducing the profitability of the banking sector, which is a major industry and employer in Hong Kong. In this environment, it is not surprising that Hong Kong, being a major centre of both global trade and global finance, experienced a severe downturn during the crisis. In particular, between the first quarters of 2008 and 2009, Hong Kong's GDP contracted by 7.7% in real terms.³²

80. The positive news is that Hong Kong's flexible economy, aided by China's strong economic growth, allowed Hong Kong to recover quickly from the crisis. In addition, unlike in other places, the crisis was mostly external in origin; it did not reveal any structural problems in Hong Kong's economy that needed to be resolved before recovery could proceed. On the whole, Hong Kong's economy grew by 2.2% in 2008 (in real terms, down from 6.4% real growth in 2007) and contracted by 2.8% in 2009. The most recent economic statistics indicate 6.2% real growth in 2010.³³ Since the real economic growth rate has returned to its pre-crisis level, Hong Kong has, by now, largely recovered from the crisis.

The Hong Kong Government's Policy Response to the Crisis

81. Hong Kong did not adopt any protectionist measures in response to the crisis and its policy response was primarily concerned with stabilizing the financial system. Though the blanket guarantee of local banking deposits was the most high-profile financial stabilization measure, the government also created a temporary facility to provide additional capital to banks (the Contingent Bank Capital Facility) and offered loan guarantees to small and medium enterprises (the Special Loan Guarantee Scheme). The Contingent Bank Capital Facility was never utilized. The Special Loan Guarantee Scheme proved more popular; before the scheme's expiry at the end of 2010, over 90 billion Hong Kong dollars' worth of loans had been guaranteed under it.³⁴ The Special Loan Guarantee Scheme has now been replaced by a SME Loan Guarantee Scheme, which may currently support up to 20 billion Hong Kong dollars' worth of loans.³⁵

32 Source: Hong Kong Census and Statistics Department (<http://www.censtatd.gov.hk>).

33 Ibid.

34 "Special Loan Guarantee Scheme extended to end 2010," 21 April 2010.
<http://www.info.gov.hk/gia/general/201004/21/P201004210100.htm>

35 "Budget Speech by the Financial Secretary," 23 February 2011.
<http://www.info.gov.hk/gia/general/201102/23/P201102230150.htm>

82. Beyond the financial stabilization measures, Hong Kong also adopted a countercyclical fiscal policy. These measures included concessions on government rates and charges, tax rebates, and the accelerated implementation of several planned infrastructure projects. In total, the rebate and tax concessions amounted to approximately 8.2 billion Hong Kong dollars. Compared to Hong Kong's 2009 GDP of 1662.2 billion Hong Kong dollars, the fiscal measures—which amounted to 0.5% of GDP—were largely symbolic.

Unemployment Effects of the 2008 Financial Crisis

83. To put the unemployment effects of the financial crisis in perspective, Figure 3 plots the aggregate unemployment rate in Hong Kong over the past decade. One immediately observes that some unemployment did result from the crisis; though unemployment had fallen to 3.6 percent in 2008, it rose to 5.4 percent in 2009. Presently, in 2010, it is down to 4.3%, or just slightly below the average unemployment rate over the past five years. Given that the unemployment rate in Hong Kong is below its five-year average, and also that the unemployment rate is quite low in absolute terms, Hong Kong's labour market seems to have fully recovered from the financial crisis.

84. Figure 3 is also valuable in that it puts the labour market effects of the 2008 crisis in perspective. One can see that, though the 2008 financial crisis did have an effect on the unemployment rate in Hong Kong, the effect was not nearly as severe as that of the 1997 Asian financial crisis. The 1997 Asian financial crisis, combined with the early 2000s global economic downturn, ultimately caused the unemployment rate in Hong Kong to reach a peak of 7.9 percent in 2003. One may conclude that, for Hong Kong, the most recent global economic crisis is mild in comparison.

85. In addition to a macro-level assessment, it is also valuable to examine how the global financial crisis may have affected unemployment rates in various sectors in the economy. To this end, Figure 4 plots unemployment rates, by industry (or previous industry for the currently unemployed), relative to the industry-specific unemployment rate in February 2008. The industry-specific unemployment rates do reveal a differential pattern as the crisis unfolded. For instance, relative to its previous level, unemployment rose the most for workers in the import/export sector. By contrast, in the retail sector—which is less exposed to shifts in global demand—unemployment is now slightly below its February 2008 level. The same is true



for the manufacturing sector. Finally, in the financial sector, unemployment has mostly recovered but it is still about 20% higher than it was in February 2008. At the peak, unemployment in the financial sector was 64% higher than its February 2008 level.

86. These relative differences notwithstanding, it is important to point out that, in absolute terms, unemployment in the import/export and financial sectors is very low. Most recently (i.e. in January 2011), the unemployment rate in the import/export sector was 3.4 percent; in the financial sector, it was 2.9 percent. These figures compare very favourably with Hong Kong's overall unemployment rate of 3.3 percent in the same period. Therefore, despite being more vulnerable to the effects of the global economic crisis, one cannot say that workers in affected sectors have done badly; their position is simply not quite as exceptional as it was before. In absolute terms, the unemployment rate is still higher for workers in the construction industry (most recently 5.4 percent) or the retail industry (most recently 4.4 percent).³⁶

87. In summary, the direct unemployment effects of the 2008 global financial crisis were quite mild when compared to the 1997 Asian financial crisis. Although unemployment increased more sharply in industries with greater exposure to world export markets, unemployment in these industries is still very low in absolute terms. Moreover, the aggregate unemployment rate has returned to its pre-crisis level. Therefore, labour markets in Hong Kong have largely recovered from the negative effects of the 2008 global financial crisis.

The Challenges Ahead

88. Hong Kong has, as a whole, been well-served by its liberal trade regime. Although many manufacturing enterprises have relocated to mainland China, the loss of these enterprises has been more than made up for by increased opportunities in China for Hong Kong service providers. A notable source of these opportunities is the Closer Economic Partnership Agreement with China, which has been supplemented numerous times over the past decade and allows highly preferential market access to Hong Kong firms in an expanding number of service areas. The workers who have benefited the most from these opportunities tended to be professionals and other highly-skilled workers who have enjoyed increased demand for their services.

36 Source: Hong Kong Census and Statistics Department (<http://www.censtatd.gov.hk>).

89. At the same time, the loss of labour-intensive manufacturing jobs has significantly worsened the position of low-skilled workers in Hong Kong, who now face dwindling opportunities in the service sector. The early part of the decade was less favourable because Hong Kong was experiencing deflation; during these years, low-skilled workers faced relatively constant nominal wages (i.e., wages that increased in real terms) but increasing levels of unemployment. During the inflationary years in the latter part of the decade, wage levels fell in real terms but unemployment declined.

90. Addressing the welfare of low-skilled workers in Hong Kong will be a significant challenge moving forward. By now, low-skilled workers' employment opportunities are largely confined to the delivery of various services to Hong Kong residents (e.g. restaurants, property management), and which by nature cannot be outsourced across the border. However, these opportunities are threatened by Hong Kong's minimum wage legislation, which may lead employers in these sectors to adopt less labour-intensive methods of production. An additional worry is that, even if the job duties remain the same, employers may nevertheless hire staff with greater qualifications, as higher wage offers tend to attract more qualified applicants. In neither case would the beneficiaries of the policy be the least fortunate in society.

91. The second major challenge for Hong Kong is the increasing competitiveness of service providers in mainland China. Although Hong Kong currently holds a pre-eminent position in financial services, logistics, tourism, and professional services, such services are increasingly available from places such as Shenzhen, Shanghai, Singapore, and other countries in the region. Moreover, Hong Kong cannot expect that mainland China will be the "factory of the world" forever. As these economies continue to develop, Hong Kong's continued economic success will depend on maintaining its competitive edge and developing new comparative advantages.

Annex on Data Sources

92. All the data referred to in this paper are available from the Hong Kong Census and Statistics Department.

Table 1. Chain Volume Measures of Gross Domestic Product (GDP) by Economic Activity - in Chained (2008)

Dollars

Economic Activity	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010 (Q2)
Agriculture and fishing	1.2	1.2	1.2	1.1	1.2	1.1	1.1	1.0	0.8	0.8	0.2
Mining and quarrying	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Manufacturing	54.0	49.1	44.2	39.7	40.3	41.2	42.1	41.4	38.7	35.2	8.7
Electricity, gas and water	33.4	34.0	35.2	35.9	36.7	37.6	37.9	38.4	38.4	39.1	9.8
Construction	64.3	63.0	61.8	59.0	53.5	49.2	44.6	44.1	47.9	48.7	13.5
Services	952.5	968.8	995.4	1038.7	1141.5	1227.4	1314.3	1406.5	1441.9	1413.6	356.3
Wholesale, retail and import and export trades, restaurants and hotels	240.1	240.7	251.3	273.7	314.9	359.1	390.7	416.6	442.5	408.6	103.5
Wholesale and retail trades	45.2	45.7	44.3	43.8	46.8	50.7	54.3	58.0	60.4	58.3	15.1
Import and export trade	160.4	163.2	175.6	198.9	229.5	266.0	290.0	307.4	329.4	300.0	75.6
Restaurants and hotels	45.8	41.1	37.5	32.4	39.8	42.5	46.5	51.6	52.6	50.3	12.8
Transport, storage and communications	78.6	80.1	85.2	85.8	97.7	104.9	112.1	117.9	120.6	114.8	29.2
Transport and storage	66.0	66.1	69.4	68.3	77.7	83.1	88.6	93.1	95.1	88.9	22.7
Communications	13.4	14.5	16.1	17.4	19.9	21.8	23.5	24.7	25.5	25.9	6.4
Financing, insurance, real estate and business services	245.9	246.9	253.7	267.7	303.7	329.9	370.1	420.0	418.4	424.6	106.7
Financing and insurance	117.8	117.5	122.1	133.9	162.0	181.3	216.9	255.0	251.8	256.6	66.2
Real estate	74.3	73.9	75.7	77.8	78.3	79.1	79.0	83.4	84.2	85.7	20.0
Business services	64.7	67.0	66.9	65.1	67.9	72.7	75.4	81.0	82.5	82.4	20.6
Community, social and personal services	249.6	259.5	258.4	259.3	266.0	265.8	269.1	273.8	279.9	283.8	72.7
Ownership of premises	148.4	153.4	156.1	160.6	163.0	167.8	171.8	177.5	180.5	181.9	44.2

Source: Hong Kong Census and Statistics Department (<http://www.censtatd.gov.hk/>).

Notes: Figures are in billions of Hong Kong dollars.

Table 2. Chain Volume Measures of Gross Domestic Product (GDP) by Economic Activity - as Percent of Total GDP

Economic Activity	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010 (Q2)
Agriculture and fishing	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Mining and quarrying	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Manufacturing	4.9	4.4	3.9	3.4	3.2	3.0	2.9	2.7	2.5	2.3	2.2
Electricity, gas and water	3.0	3.0	3.1	3.1	2.9	2.8	2.6	2.5	2.5	2.5	2.5
Construction	5.8	5.6	5.4	5.0	4.2	3.6	3.1	2.9	3.1	3.2	3.5
Services	86.2	86.8	87.5	88.4	89.7	90.5	91.3	91.8	92.0	91.9	91.7
Wholesale, retail and import and export trades, restaurants and hotels	21.5	21.3	21.9	23.1	24.6	26.5	27.1	27.2	28.2	26.6	26.6
<i>Wholesale and retail trades</i>	3.9	3.9	3.8	3.7	3.6	3.7	3.8	3.8	3.9	3.8	3.9
<i>Import and export trade</i>	13.7	13.9	14.9	16.7	17.9	19.6	20.1	20.1	21.0	19.5	19.5
<i>Restaurants and hotels</i>	3.9	3.5	3.2	2.7	3.1	3.1	3.2	3.4	3.4	3.3	3.3
Transport, storage and communications	7.0	7.1	7.4	7.2	7.6	7.7	7.8	7.7	7.7	7.5	7.5
<i>Transport and storage</i>	5.9	5.8	6.0	5.8	6.1	6.1	6.2	6.1	6.1	5.8	5.9
<i>Communications</i>	1.2	1.3	1.4	1.5	1.6	1.6	1.6	1.6	1.6	1.7	1.7
Financing, insurance, real estate and business services	22.0	21.9	22.1	22.6	23.8	24.3	25.7	27.4	26.7	27.6	27.5
<i>Financing and insurance</i>	10.1	9.9	10.2	10.9	12.5	13.2	15.0	16.7	16.1	16.7	17.0
<i>Real estate</i>	6.4	6.3	6.3	6.4	6.0	5.8	5.5	5.5	5.4	5.6	5.1
<i>Business services</i>	5.5	5.7	5.6	5.3	5.2	5.3	5.2	5.3	5.3	5.4	5.3
Community, social and personal services	22.3	23.0	22.5	21.9	20.8	19.6	18.7	17.9	17.9	18.5	18.7
Ownership of premises	13.3	13.6	13.6	13.6	12.8	12.4	11.9	11.6	11.5	11.8	11.4

Source: Hong Kong Census and Statistics Department (<http://www.censtatd.gov.hk>) and author's calculations.

Table 3. Employment by Economic Activity -- as Percent of Total Employment

Economic Activity	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Manufacturing	7.1	6.6	6.0	5.6	5.4	5.3	5.1	4.9	4.6	3.8
Construction	9.4	9.0	8.9	8.3	8.1	8.0	7.9	7.9	7.6	7.6
Services	82.7	83.7	84.3	85.4	85.7	86.0	86.3	86.7	87.2	88.0
Wholesale, retail and import and export trades, restaurants and hotels	33.9	33.6	33.4	33.8	34.3	34.4	34.0	33.9	33.5	32.8
Transport, storage and communications	10.9	10.7	10.5	10.4	10.6	10.5	10.5	10.4	10.4	11.8
Financing, insurance, real estate and business services	14.1	14.7	14.7	14.6	14.6	15.0	15.6	15.8	16.7	18.2
Community, social and personal services	23.8	24.7	25.7	26.5	26.2	26.0	26.3	26.5	26.6	25.1
Other	0.8	0.7	0.8	0.7	0.8	0.7	0.7	0.6	0.6	0.6

Source: WTO Trade Policy Reviews (Hong Kong, China), various years.

Table 4. Goods and Services Balance - in Chained (2008) Dollars

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Goods and services balance	52.5	56.1	99.8	114.5	119.3	179.0	175.7	177.5	170.7	116.6
Goods balance	-57.0	-59.1	-37.1	-45.2	-75.5	-61.8	-113.9	-156.0	-180.1	-207.8
Exports	1410.1	1354.9	1472.3	1756.1	2111.5	2345.6	2578.2	2739.9	2844.0	2489.8
Imports	-1467.1	-1414.0	-1509.5	-1801.3	-2187.0	-2407.4	-2692.1	-2896.0	-3024.1	-2697.6
Services balance	109.5	115.2	137.0	159.7	194.9	240.8	289.6	333.5	350.8	324.4
Credit	281.3	291.9	327.8	363.9	447.5	516.0	590.4	670.8	717.2	667.7
Transportation	88.9	85.2	97.8	108.1	140.8	164.6	182.0	202.6	245.0	194.0
Travel	41.1	42.2	54.8	55.8	73.0	83.4	94.5	108.9	119.2	127.4
Insurance	3.1	3.2	3.2	3.1	3.3	3.4	3.4	3.7	4.3	4.2
Financial	30.4	31.8	30.8	29.4	37.0	50.8	75.2	98.4	92.0	84.0
Other	117.8	129.4	141.2	167.5	193.4	213.9	235.4	257.1	276.8	258.2
Debit	-171.8	-176.7	-190.9	-204.2	-252.6	-275.2	-300.8	-337.3	-366.5	-343.3
Transportation	-43.4	-46.3	-45.7	-52.5	-70.5	-84.8	-94.3	-110.3	-123.3	-105.8
Travel	-87.0	-87.4	-91.3	-89.5	-107.7	-107.8	-114.0	-119.1	-125.3	-123.5
Insurance	-3.7	-3.7	-4.4	-4.9	-5.0	-4.9	-5.0	-5.6	-5.7	-5.0
Financial	-5.7	-6.3	-7.3	-6.9	-9.4	-11.4	-16.4	-22.2	-24.4	-26.5
Other	-32.0	-32.9	-42.2	-50.5	-60.1	-66.4	-71.2	-80.0	-87.8	-82.5

Source: Hong Kong Census and Statistics Department (<http://www.censtatd.gov.hk>) and author's calculations.

Notes: Figures are in billions of Hong Kong dollars.

Table 5. Goods and Services Balance - as Percent of GDP

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Goods and services balance	4.5	4.7	8.3	9.2	8.9	12.4	11.4	10.8	10.2	7.2
Goods balance	-4.8	-5.0	-3.1	-3.6	-5.6	-4.3	-7.4	-9.5	-10.7	-12.8
Exports	119.9	114.6	122.3	141.7	156.9	162.9	167.2	167.1	169.8	152.8
Imports	-124.7	-119.6	-125.4	-145.3	-162.5	-167.2	-174.6	-176.6	-180.5	-165.6
Services balance	9.3	9.7	11.4	12.9	14.5	16.7	18.8	20.3	20.9	19.9
Credit	23.9	24.7	27.2	29.4	33.3	35.8	38.3	40.9	42.8	41.0
Transportation	7.6	7.2	8.1	8.7	10.5	11.4	11.8	12.4	14.6	11.9
Travel	3.5	3.6	4.6	4.5	5.4	5.8	6.1	6.6	7.1	7.8
Insurance	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3
Financial	2.6	2.7	2.6	2.4	2.7	3.5	4.9	6.0	5.5	5.2
Other	10.0	10.9	11.7	13.5	14.4	14.9	15.3	15.7	16.5	15.8
Debit	-14.6	-14.9	-15.9	-16.5	-18.8	-19.1	-19.5	-20.6	-21.9	-21.1
Transportation	-3.7	-3.9	-3.8	-4.2	-5.2	-5.9	-6.1	-6.7	-7.4	-6.5
Travel	-7.4	-7.4	-7.6	-7.2	-8.0	-7.5	-7.4	-7.3	-7.5	-7.6
Insurance	-0.3	-0.3	-0.4	-0.4	-0.4	-0.3	-0.3	-0.3	-0.3	-0.3
Financial	-0.5	-0.5	-0.6	-0.6	-0.7	-0.8	-1.1	-1.4	-1.5	-1.6
Other	-2.7	-2.8	-3.5	-4.1	-4.5	-4.6	-4.6	-4.9	-5.2	-5.1

Source: Hong Kong Census and Statistics Department (<http://www.censtatd.gov.hk>) and author's calculations.

Table 6. Employees Earning HK\$24 per Hour or Less, by Economic Activity (2nd Quarter 2009)

Economic Activity	Number (in thousands)	Percent (of low-wage workers)	Percent (of workers in sector)
<i>Low Paying Sectors</i>	111.0	85.3	14.7
Retail	17.0	13.1	6.8
Restaurants	30.0	23.1	15.4
Estate Management, security and cleaning services	47.3	36.4	22.0
Other low-paying sectors	16.7	12.8	22.9
<i>Other Sectors</i>	19.1	14.7	0.9
Manufacturing	1.9	1.5	1.7
Construction	2.9	2.2	1.3
Wholesale and import/export trade	2.3	1.8	0.5
Hotels and Catering	0.3	0.2	1.7
Transport, Storage and Communications	3.6	2.8	1.1
Financing, insurance, real estate and business services	2.1	1.6	0.5
Education, medical, other community and personal services	5.9	4.5	1.5
Others	0.1	0.1	0.6

Source: Hong Kong Census and Statistics Department (<http://www.censtatd.gov.hk>) and author's calculations.

Notes: "other low-paying sectors" are elderly homes, laundry and dry cleaning services, hairdressing and other personal services, local courier services, and food processing and production.

Table 7. Real Salary Indices (B) for Middle-level Managerial and Professional Employees Analysed by Selected Industry Section (June 1995 = 100)

	Manufacturing, Electricity and Gas Supply	Building and Construction and Related Trades	Import/Export, Wholesale and Retail Trades	Transportation, Storage, Communications and Travel Agencies	Financial and Insurance Activities	All Selected Industry Sections
2004	132.3	128.9	142.0	147.0	145.2	141.0
2005	132.7	132.4	142.7	150.5	148.1	143.0
2006	132.5	134.8	142.1	151.9	153.2	144.6
2007	133.2	138.6	145.9	154.6	160.0	148.9
2008	131.1	142.2	143.1	152.5	165.1	149.1
2009	131.3	142.1	141.5	152.8	160.4	147.1
2010	130.6	144.7	141.8	153.4	162.5	148.2

Source: Hong Kong Census and Statistics Department (<http://www.censtatd.gov.hk>).

Notes: The salary index reflects only changes in salary rates of those middle-level managerial and professional employees who have been in the same occupation and in the same company in two consecutive years.

Table 8. Average Monthly Wages by Industry (in 2010 Hong Kong dollars)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Manufacturing	13688	14661	15842	16168	15822	15342	15840	15857	15580	16164
Construction	14300	15050	14860	15175	15530	14976	14510	14916	14338	14958
Wholesale, retail and import/export trades, restaurants, and hotels	13417	14261	14624	14713	14647	14845	15296	15320	15339	15184
Transport, storage and communications	14336	15011	15807	15600	15524	15999	15738	15206	15461	14813
Financing, insurance, real estate and business services	19918	21381	23075	23123	22760	22579	22749	23124	23871	23959
Community, social and personal services	15779	17554	17845	17637	18127	17577	16458	16387	16187	15579

Source: Hong Kong Census and Statistics Department (<http://www.censtatd.gov.hk>) and author's calculations.

Table 9. Variance of Log Monthly Wages by Industry

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Manufacturing	0.616	0.625	0.656	0.691	0.668	0.672	0.679	0.703	0.688	0.706
Construction	0.534	0.541	0.559	0.593	0.604	0.593	0.555	0.558	0.537	0.562
Wholesale, retail and import/export trades, restaurants, and hotels	0.623	0.635	0.661	0.681	0.689	0.688	0.700	0.707	0.702	0.707
Transport, storage and communications	0.548	0.542	0.578	0.592	0.613	0.629	0.618	0.584	0.612	0.602
Financing, insurance, real estate and business services	0.716	0.707	0.759	0.770	0.778	0.792	0.797	0.783	0.794	0.813
Community, social and personal services	0.923	0.943	0.972	0.974	0.999	0.981	0.971	0.961	0.970	0.976

Source: Hong Kong Census and Statistics Department (<http://www.censtatd.gov.hk>) and author's calculations.

Table 10. Regression Analysis of Log Wages in Trade-Affected Sectors

Covariates	Estimates and (standard errors)		
	Model 1	Model 2	Model 3
Sector is growing (as share of GDP)	0.1047 (0.0024)		0.1010 (0.0024)
Sector is growing (as share of employment)		-0.0387 (0.0024)	-0.0217 (0.0024)
Age	0.0962 (0.0007)	0.0959 (0.0007)	0.0963 (0.0007)
Age Squared (x 100)	-0.1045 (0.0008)	-0.1039 (0.0008)	-0.1045 (0.0008)
Female	0.1979 (0.0037)	-0.2043 (0.0038)	-0.1965 (0.0038)
Married	0.2532 (0.0038)	0.2484 (0.0038)	0.2526 (0.0038)
Married x Female	-0.2720 (0.0049)	-0.2699 (0.0049)	-0.2719 (0.0049)

Notes: additional covariates are full sets of indicator variables for educational attainment and year of survey. Data (249,374 observations) are from Hong Kong's General Household Surveys, 1999-2008.

Table 11. Employees Earning HK\$27 per Hour or Less, by Economic Activity (2nd Quarter 2009)

Economic Activity	Number (in thousands)	Percent (of low-wage workers)	Percent (of workers in sector)
<i>Low Paying Sectors</i>	224.5		83.1
Retail	43.4		16.1
Restaurants	55.1		20.4
Estate Management, security and cleaning services	99.5		36.9
Other low-paying sectors	26.5		9.8
<i>Other Sectors</i>	45.5		16.9
Manufacturing	8.0		3.0
Construction	5.8		2.1
Wholesale and import/export trade	6.5		2.4
Hotels and Catering	1.3		0.5
Transport, Storage and Communications	7.6		2.8
Financing, insurance, real estate and business services	3.9		1.4
Education, medical, other community and personal services	12.0		4.4
Others	0.4		0.1
			0.6

Source: Hong Kong Census and Statistics Department (<http://www.censtatd.gov.hk>) and author's calculations.

Notes: "other low-paying sectors" are elderly homes, laundry and dry cleaning services, hairdressing and other personal services, local courier services, and food processing and production.



Figure 1

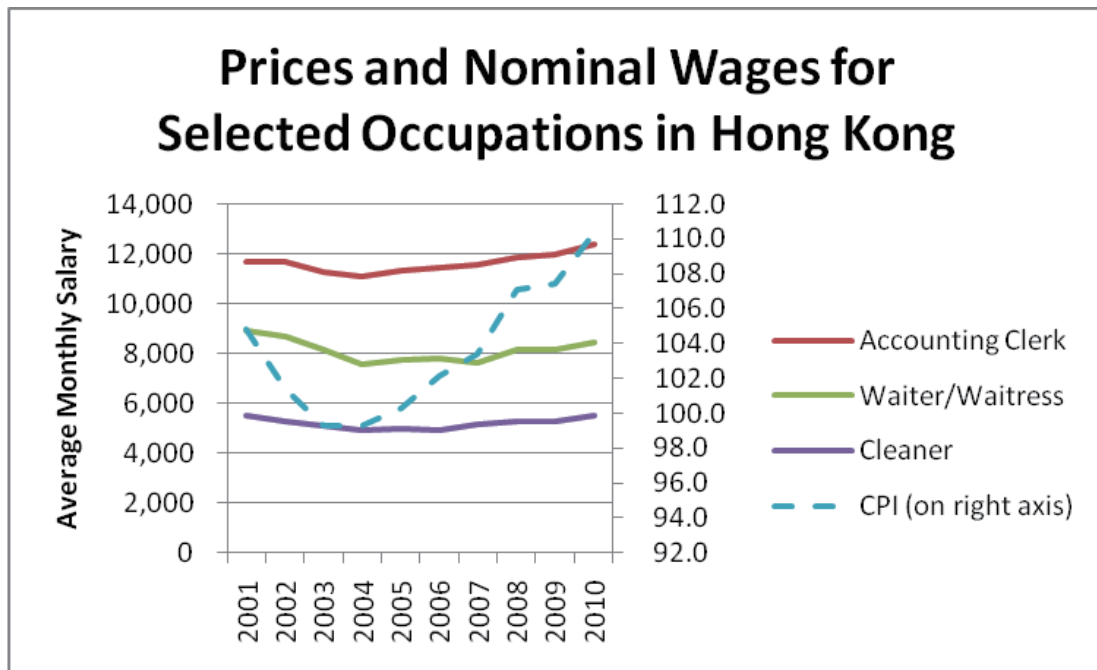


Figure 2

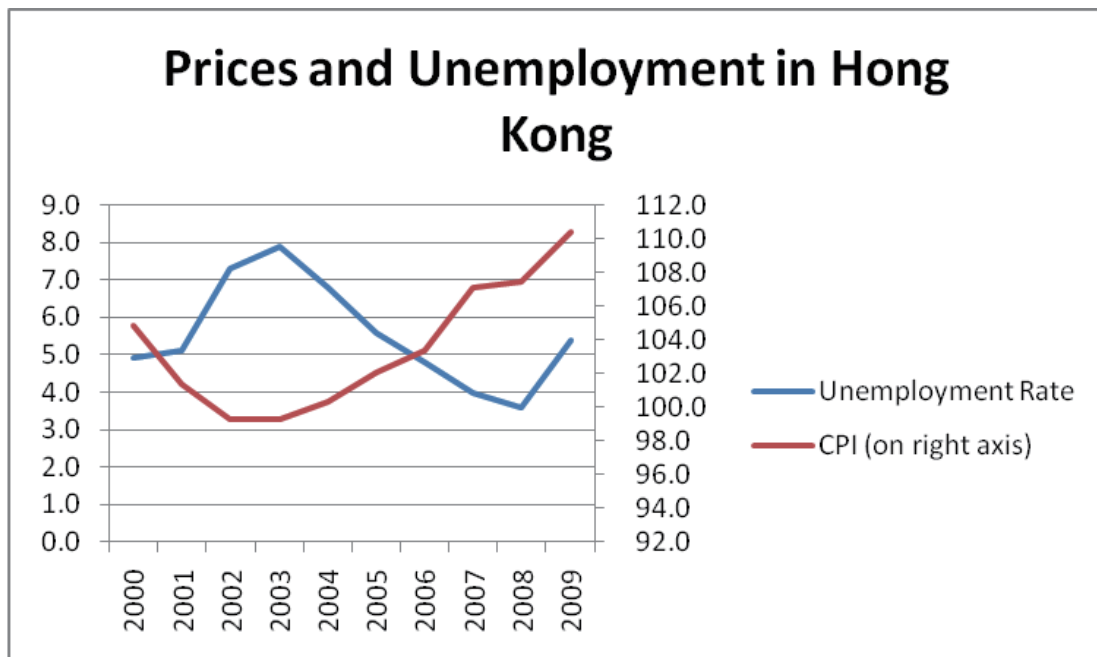


Figure 3

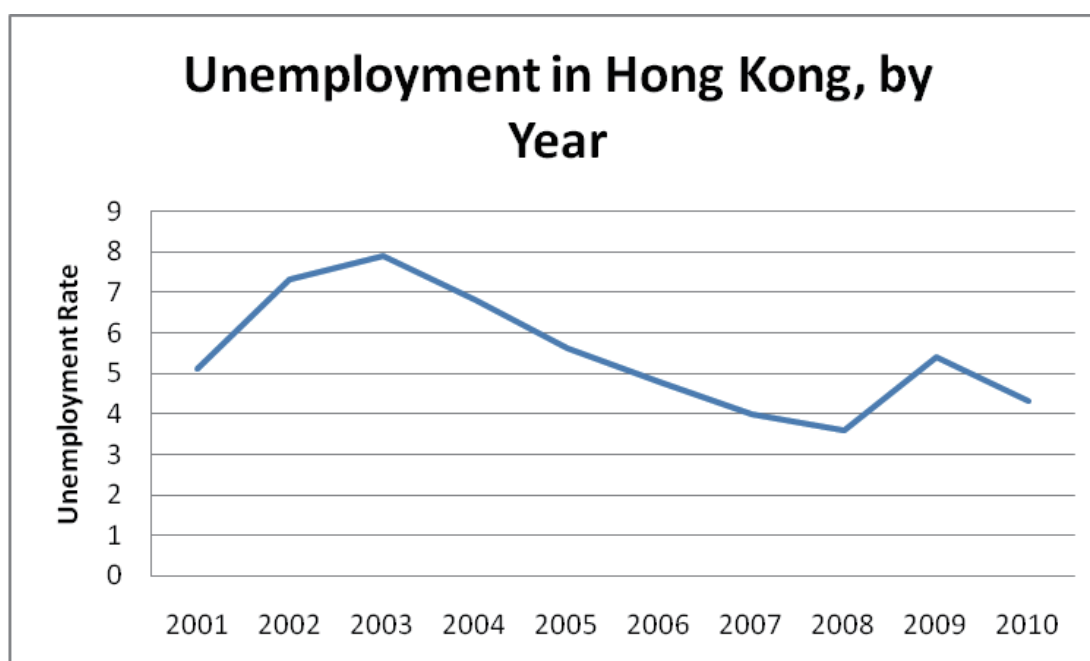
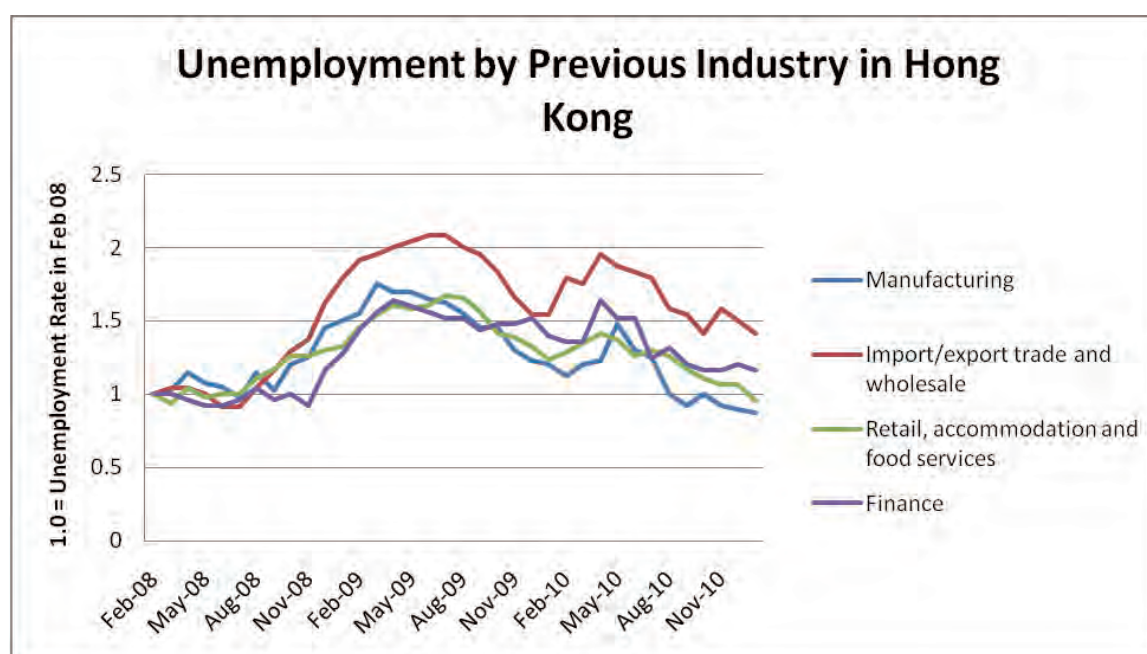


Figure 4





Employment, Unemployment and Economic Growth: Singapore's Experience

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Introduction

Singapore was the first Asian country that slipped into a technical recession in the third quarter of 2008 following the global financial crisis which rocked the world economies in that year. However, by 2010, it was the country that registered the highest rate of GDP growth in the world. As at June 2011, Singapore's overall and resident unemployment rate stands at 2.1% and 3.0% respectively. By most standards of developed economies, this would have been regarded as operating at full employment.

This paper traces the structural changes that have taken place in employment scene in Singapore over the past 3 decades. It also analyses the nature and prospects for unemployment and highlights the policy measures that have been introduced to tackle the problem of unemployment in recent years.

Analysis of Employment Shares

In common with most developed economies, the manufacturing share of total employment in Singapore has declined over the past three decades in favour of employment in the services sector. The momentum of services employment growth became more rapid during last two decades when manufacturing share fell by almost 12 percentage points while services share increased to almost 70 per cent of all employment in Singapore in 2010.

Table 1: Sectoral Shares of Employment in Singapore 1980-2010

	Manufacturing	Services	Construction
1980	30.3	58.9	10.0
1990	29.0	61.6	8.8
2000	20.3	64.6	14.5
2010	17.3	69.3	12.7

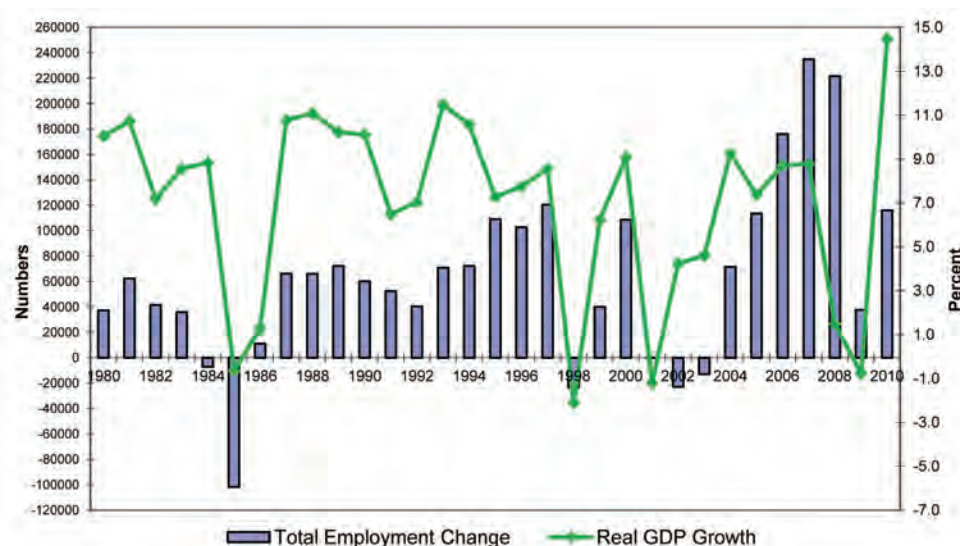
Source: Singapore Department of Statistics STS database

Analysis of Employment and GDP Growth

A cursory study of the relationship between total employment change and real GDP growth over the last 3 decades shows a change in the response of employment to negative GDP growth (Figure 1). In the 1980s, the negative real GDP growth of -1.4 % in 1985 caused a 100,000 reduction in total employment. In 1998 and 2001, the shrinking economy engendered proportionately much smaller reductions in employment, despite the larger employment stock in these later periods. In the recent global recession, total employment increased despite negative GDP growth recorded in 2009. The reason for the latter response may be attributed to the strong growth momentum generated during the 2005 to 2008 period which saw acute shortage of labour due to the 'maximum growth at all costs' policy adopted by policymakers. This created a situation where employers chose to keep their redundant workers in the hope that the downturn would be temporary. The retention of workers was aided

significantly by the active labour market policies in the S\$20.5 billion (US\$15.7 billion) Resilience Package in the 2009 Budget. An examination of the average growth rate of total employment and real GDP over the 1980-2010 period (Table 2) reveals an increasing tendency towards economic growth which is driven by larger expansion of employment. This is evident in the employment share of growth which grew from 31 per cent in the 1980s to 52 per cent in the 1990s and 75 per cent in the 2000s. On the other hand, the implied labour productivity growth has fallen from an average of 5.5 per cent in the 1980s to 1.3 per cent share in the past decade. This development which provides greater employment opportunities and stability seems to augur well for workers. However, while this conclusion may be valid for overall total employment, it would be instructive to examine the nature of employment changes disaggregated by sectoral category and residential status¹.

Figure 1: Total Employment Change and Real GDP Growth 1980-2010



¹ Figures for sectoral employment changes by residential status are based on data in "Jobs for Resident Workforce", Statement by Acting Minister for Manpower, Singapore Parliament Reports, 14 August 03 and Ministry of Manpower 2010 Labour Market report.

Table 2: Average Total GDP and Employment Growth 1980-2010

	1980-1990	1990-2000	2000-2010
Average Annual Real GDP Growth	7.8	7.3	5.2
Average Annual Employment Growth	2.4	3.8	3.9
Average Implied Annual Productivity Growth	5.5	3.5	1.3

Source: Singapore Department of Statistics STS database

Sectoral Employment Changes

An examination of sectoral employment changes and GDP growth yields some interesting observations. Between 1980 and 1990, manufacturing employment and output growth were positively related (Figure 2). However, between 1990 and 2003, the output and employment growth linkage has become less predictable. Employment has contracted even in the face of positive manufacturing output growth (e.g. 1992-93, 1996 and 2002) and employment expansion remains muted in the presence of strong output growth (e.g. 1994-95, 1999). Strong growth in manufacturing employment has been recorded since 2004 despite weaker output growth rates. The implied labour productivity growth analysis (Table 3) shows productivity share of growth rising in the 1990s before falling steeply in both share and absolute levels in the last decade.

Figure 2: Manufacturing Employment Change and Real GDP Growth 1980-2010

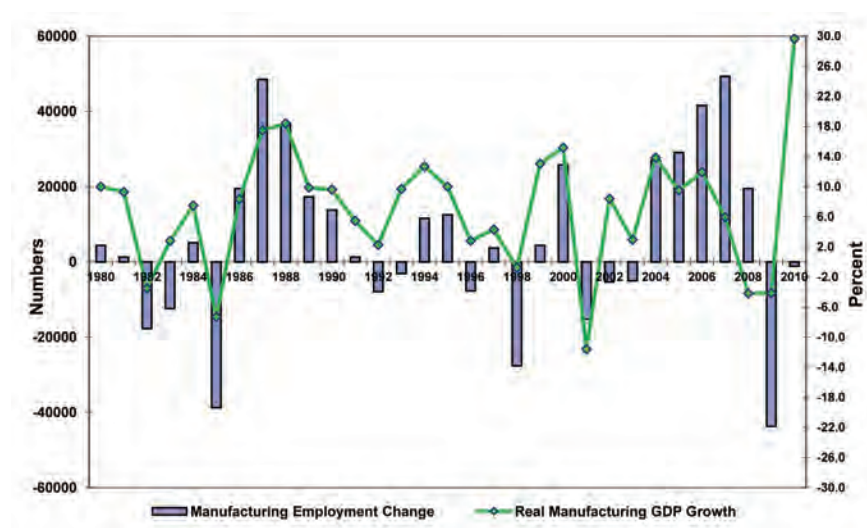


Table 3: Average Sectoral GDP and Employment Growth 1980-2010

	Manufacturing			Construction			Services		
	1980 - 1990	1990 - 2000	2000 - 2010	1980- 1990	1990 - 2000	2000 - 2010	1980 - 1990	1990 - 2000	2000 - 2010
Average Annual Real GDP Growth	7.3	7.0	4.8	5.5	11.7	2.9	8.4	7.6	5.9
Average Annual Employment Growth	2.0	0.1	2.8	2.6	10.2	2.7	2.7	4.3	4.5
Average Implied Annual Productivity Growth	5.3	6.9	2.0	2.9	1.5	0.2	5.6	3.3	1.5

Source: Singapore Department of Statistics STS database

Service sector employment has displayed strong positive growth since 1986 (Figure 3). This expansion of the service sector workforce continued despite negative sectoral growth recorded during the Asian financial crisis in 1998 and the global recession in 2009. The strong employment growth in the face of weak output growth has meant that labour productivity of the services sector has suffered successive declines over the past three decades from an average of 5.6 per cent per annum in the 1980s down to 1.5 per cent in the 2000s.

Construction sector employment has varied pro-cyclically with GDP growth (Figure 4) with sharp increases in employment in 1995 to 1997 and 2006 to 2008 a result of the property boom that accompanied the escalation in property prices during these periods. Due to the nature of jobs in this sector, employment expansion is heavily dependent on significant numbers of primarily unskilled foreign workers and average productivity growth performance is the weakest of the major sectors, falling from 2.9 per cent in the 1980s to 0.2 per cent in the 2000s.

Figure 3: Services Employment Change and Real GDP Growth 1980-2010

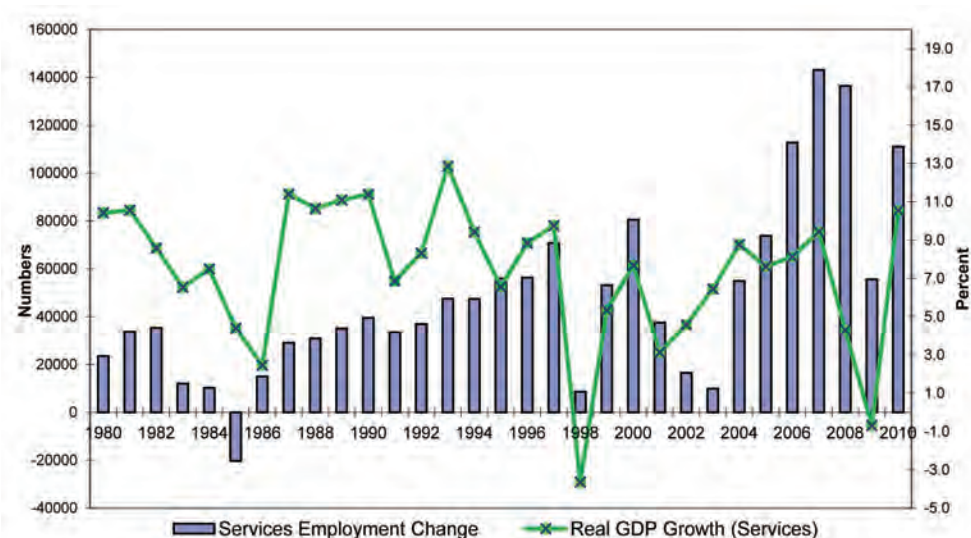
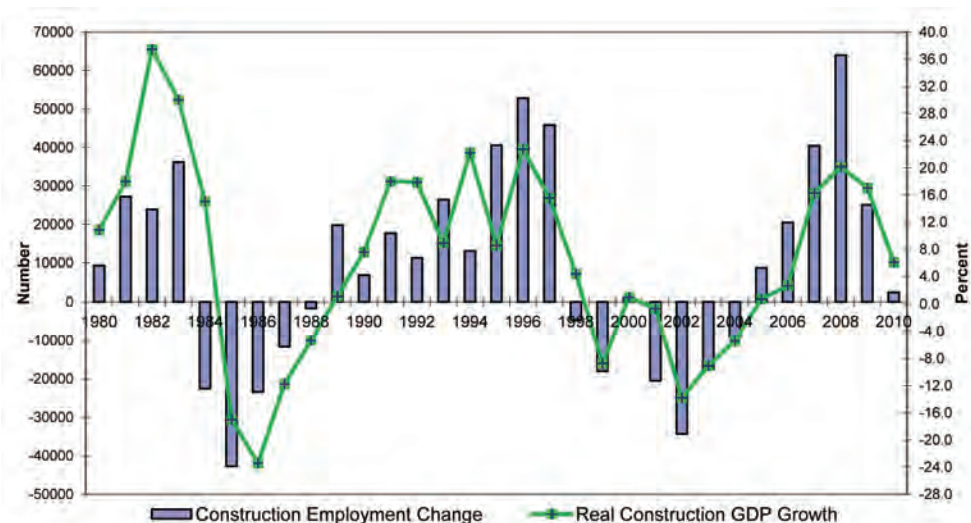
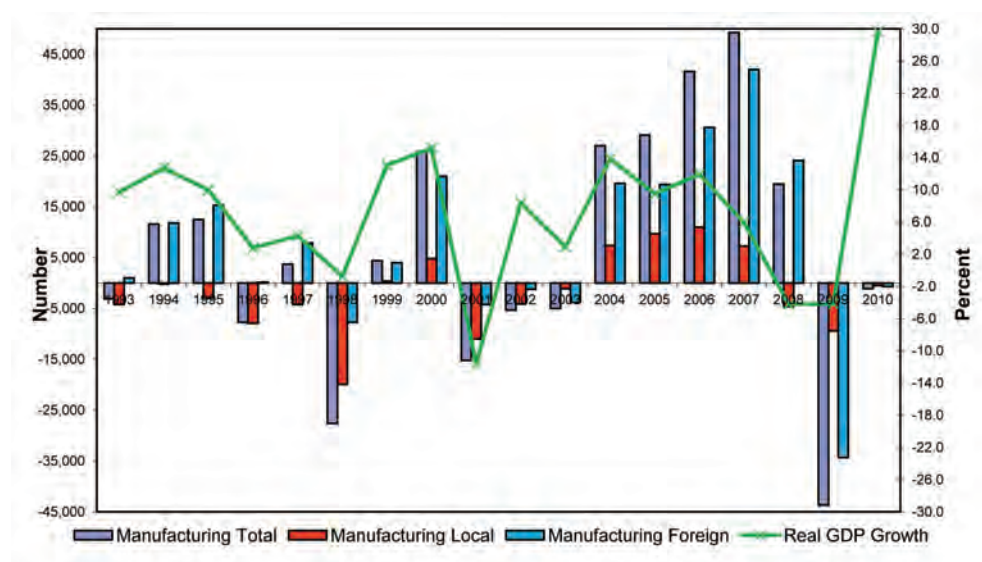


Figure 4 : Construction Employment Change and Real GDP Growth 1980-2010



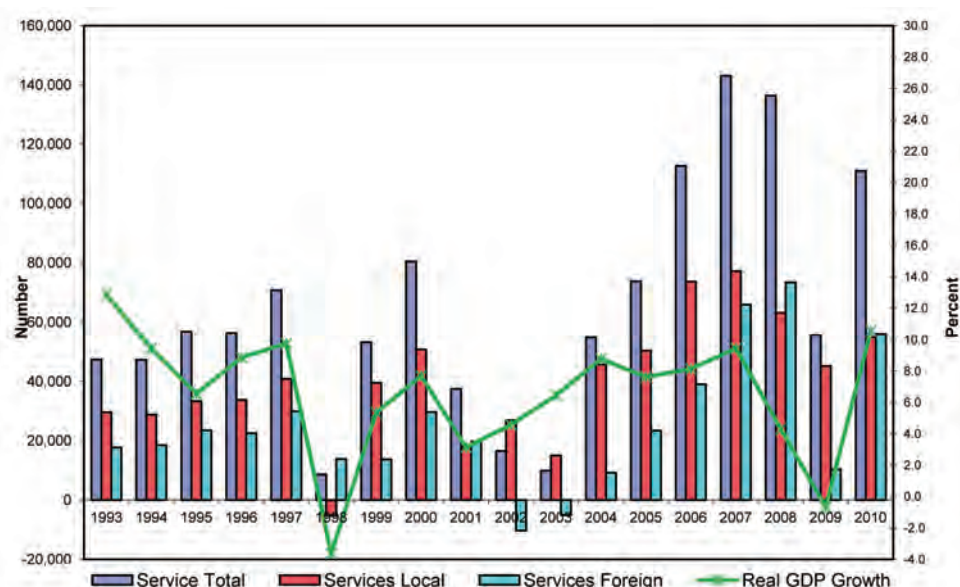
The disaggregation of employment changes by residential status reveals some interesting trends in domestic and foreign labour employment in the manufacturing and services sectors.

Figure 5 : Manufacturing Employment Change by Residential Status 1993-2010



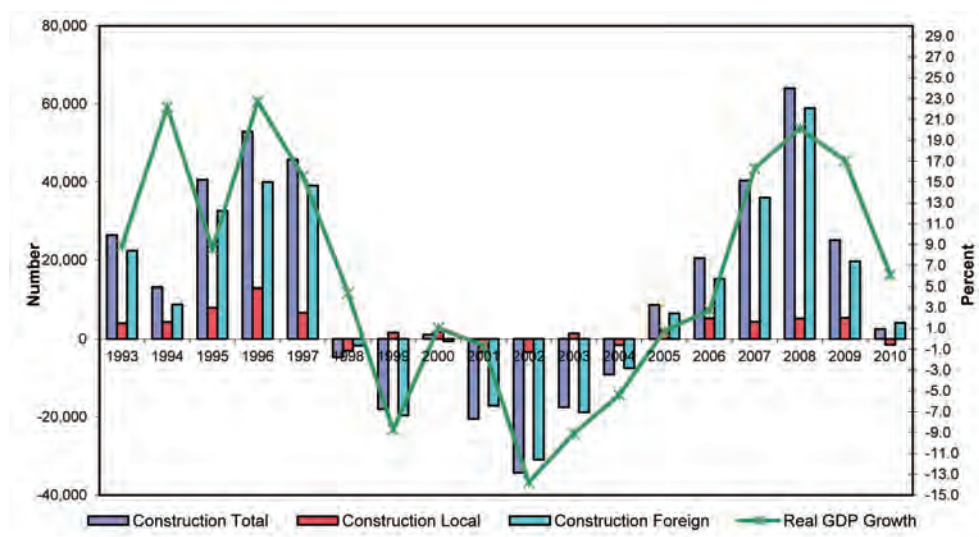
As noted Hui (2004), employment of local workers in manufacturing experienced greater downside tendencies and constituted a larger proportion of job losses and smaller proportion of jobs created (Figure 5). Between 1994 to 1997 and in 2008, employment of local workers declined even though total employment in manufacturing increased. This phenomenon could be attributed to the fact that foreign workers are usually employed on term contracts that involve significant fixed upfront costs for both workers and employers. With the onset of recession, there could be a greater tendency for profitable firms to retain foreign workers to avoid the high fixed costs of re-employing the foreign workers and retrench locals whose costs of re-employment in the event of an upturn would be lower. The exception of higher retrenchment of foreign workers in 2009 is attributable to preemptive effect of the Jobs Credit Scheme which is targeted at encouraging retention of local workers by employers through the direct payment of a subsidy for continuing employment of local workers.

Figure 6: Services Employment Change by Residential Status 1993-2010



Local workers generally constitute a larger share of the changes in services employment (Figure 6). In 1998, employment of locals fell marginally while foreign employment expanded. But in 2002, the reverse occurred. The higher employment of locals could be attributed to the greater restrictions on employment of foreign workers in the services sector in the 1990s. Unlike the manufacturing sector, employers in services sector also have a stronger preference for locals due to the comparative advantage that locals have over foreigners in the area of language and customer's tastes in some service related jobs. However, with the rapid expansion of services sector and the increasing shortage of local workers for service sector jobs, the dependency ceiling for foreign workers had been increased gradually from 30 per cent of the company's total workforce prior to July 2005 to 50 per cent from January 2008. This is reflected in the increasing share of foreign new jobs going to foreign workers over this period.

Figure 7: Construction Employment Change by Residential Status 1993-2010



Changes in employment in the construction sector have been dominated by foreign workers (Figure 7), reflecting the difficulty in recruiting locals for jobs in this sector. In 2010, foreigners constituted 69 per cent of all employment in this sector.

Foreign Workforce and its Impact on Local Employment Stability

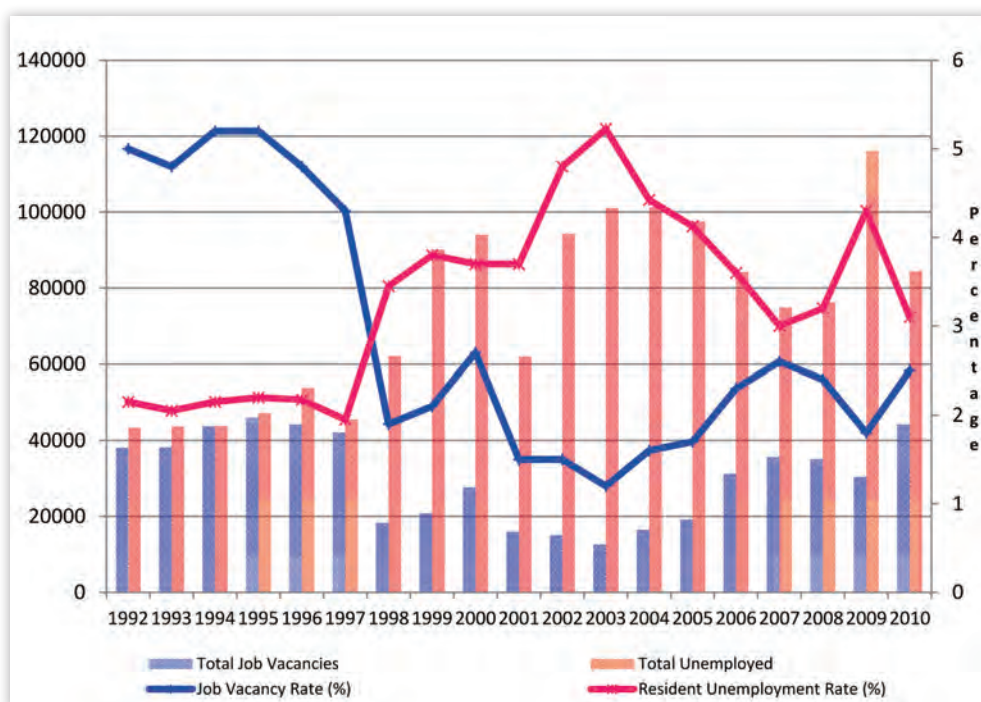
The presence of substantial number of foreign workers has been rationalized by policy makers on the grounds of their complementary effect on local employment as well as the "employment stability or safety buffer" against retrenchments of local workers during recession times. However, an examination of the sectoral changes in employment shows that while this appeared to hold true in the 1985 recession when foreign workers constituted a large proportion of displaced workers (Hui, 1998), aggregate employment changes in the manufacturing sector in the last decade, does not appear to support this argument. As noted earlier, there are significant fixed costs involved in the employment of foreign labour which tends to favour their retention over locals in the event of an economic downturn. Since Singapore also does not have any employment laws that require firms to favour locals over other nationalities in a retrenchment exercise, the practice of many firms had been to retain their best workers regardless of nationality.

Given the relatively longer time period, higher adjustment costs and increased difficulties associated with recruitment of foreign labour, the axe had fallen on many locals in retrenchments.

Trends in Unemployment

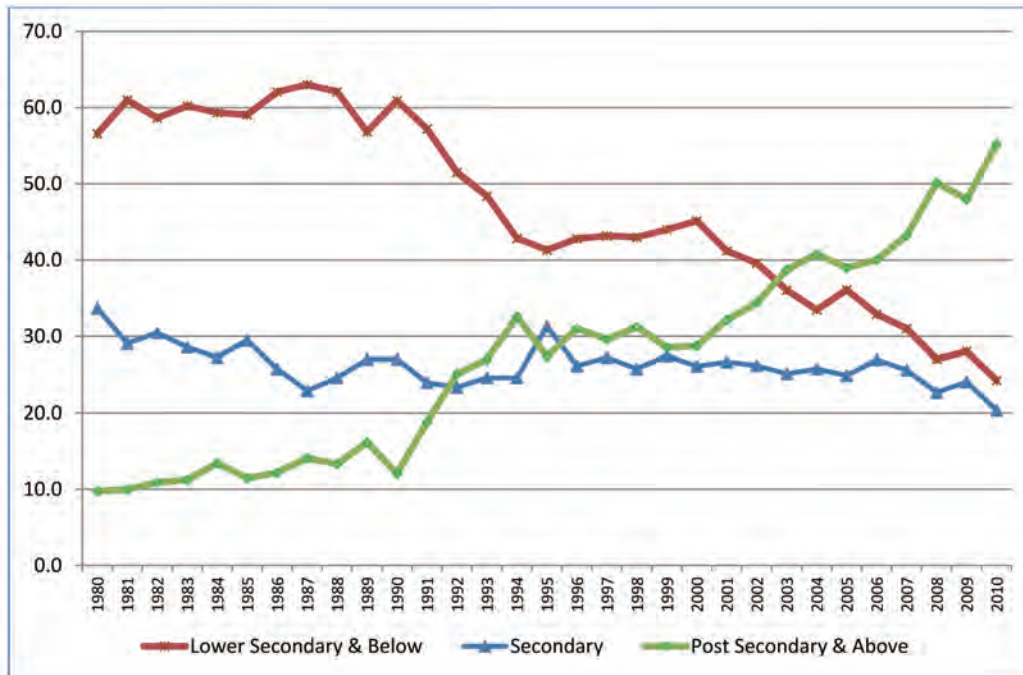
Prior to 1997 Asian Financial Crisis, Singapore was in an enviable position where the job vacancy rates were higher than the unemployment rates (Figure 8). However, since 1997, the number of unemployed has persistently outstripped the number of job vacancies available, and this gap has been widening over the years. The unemployment rate which average around 2.0% in the 1990s has increased significantly peaking at 5.2 % in 2003. The failure to revert back to the pre-crisis level suggests a shift in the nature of unemployment towards increasing incidence of structural unemployment.

Figure 8: Job Vacancy Rate and Resident Unemployment Rate 1992-2010



Source: Ministry of Manpower, Labour Market Statistical Information

Figure 9: Unemployment Share by Education Level 1980 - 2010



Source: Various Report on Labour Force in Singapore. Data for 1995 and 2005 are from the General Household Survey. Data for 2000 is from the Census of Population.

Educational Profile of Unemployed

There have been significant changes in the educational profile of the unemployed in Singapore (Figure 9). Relative to their share of employment, the share of unemployment among those with lower secondary and below education has fallen over the years. This is due to the decrease in this group's employment share and as well as the relatively favourable market opportunities for them. In 1980 their share of unemployment was 57.2% compared to their employment share of 46.2%. In 2010, these numbers have dropped to 24.3%.and 22.1% respectively.

The share of unemployed with post-secondary/diploma and above education has seen a significant upward trend over the years. This increase is partly in step with the increasing proportion employed workers who have attained at least post-secondary/ diploma qualifications as well as changes that have taken place in Singapore's immigration policy. In 1980, the share those unemployed with at least post-secondary/ diploma education stood at 9.8% of the total employed. By 2010, the share of unemployed post-secondary/ diploma graduates more than doubled to 55.2% of total unemployed. The corresponding educational level shares of the employed in these two periods are 12.4% and 57.8%. The sharp increase in this proportion started from 1990 coincided with the introduction of a new liberal policy towards foreign skilled labour².

There has been a steep increase over the years in the unemployment share for post-secondary/ diploma graduates which was below 10% up till the 90s compared to their employment share of 16.4%. This has risen to 30.6% in 2010 compared to their employment share of about the same magnitude. While attaining post-secondary education or to be a diploma holder was widely considered a respectable achievement in the 1970s and 1980s, the relentless move towards a knowledge-based economy and the rising expectations of attaining higher education has made this group of workers the "sandwiched" class who are over-qualified for plant operation or manual jobs but are under-qualified for professional jobs.

Unemployment among degree holders has also seen a rising trend. The unemployment share of graduates was at a low of 1.8% in 1976 and reached a high of 24.8% in 2009. Even in non-crisis years, there has been an upward trend of graduates being unemployed. The rising educational level of the unemployed has been accompanied by a significant increase in the share the unemployed who previously held professional, managers and technicians jobs. This proportion increased from 7.2% in 1976 to 36.2% in 2010 as a result of Singapore's shift in its economic growth strategy to a high-tech value-added manufacturing and rapid expansion of the services sector.

The profile of the retrenched unemployed (Table 4) also indicate a sharp increase in the share of those who possess post secondary and higher education from 3.1 % in 1976 to 51.1% in 2010. Of these graduates constitute more than half of the retrenched. The education expansion and the professionalization of the workforce therefore led to a growing class of educated unemployed. This shows that education alone is inadequate in averting the incidence of unemployment.

2 Under the more liberal policy, a foreigner qualified for permanent residence if the person has at least secondary education, earned at least \$1500 with five years working experience, or passed at least five General Certificate of Education subjects at Ordinary level, or has acceptable trade qualifications.



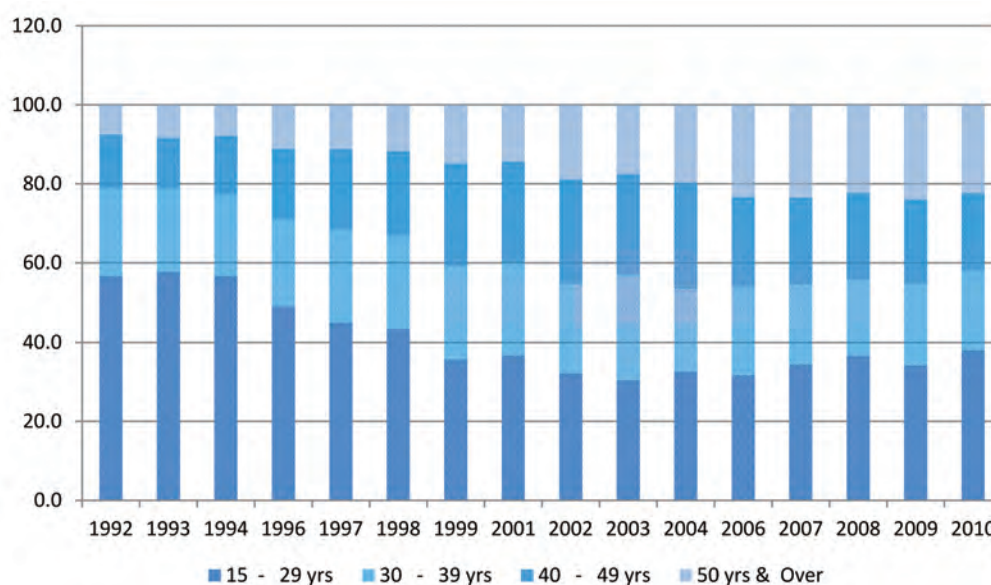
Table 4: Profile of Unemployed and Retrench Workers (%)

	1976	1981	1986	1991	1996	2001	2006	2010
Share of managers, professionals & technicians	7.2	9.4	8.3	14.7	21.9	27.8	30.6	36.2
Share of Retrenched Unemployed								
In total unemployed	13.0	5.0	25.3	4.8	4.9	19.1	12.8	11.1
With below secondary education	71.9	67.8	63.0	62.8	62.9	50.3	38.0	28.7
With above secondary education	3.1	3.3	7.2	13.9	11.3	24.0	35.0	51.1
With graduate degrees	0	1.6	1.6	7.0	3.2	9.4	18.0	26.6

Unemployment by Age

The unemployment share of those in age group 15 – 29 has consistently formed the largest proportion of total unemployment in the past two decades (Figure 10). This could be due attributed to factors such as lower education level and inexperience of youth workers which adversely affect their ability to find a job; or frictional unemployment among the younger adults who are more likely to hop in between jobs as compared to older workers who have greater specific skills and stronger preference for job stability. However, the share of unemployment in the 15 -29 age group has been falling due to a rise in the number of unemployed older worker. The unemployment share of older workers in the 50 & above age group tripled from 7.3% in 1992 to 22.4% in 2010. This is in line with the rising share of older workers age 50 and above in the workforce which rose from 12.8% of total employment in 1992 to 26.6% in 2010. Likewise the employment share of the 40 -49 age group which rose from 19.7% in 1992 to 26.8% in 2010 is matched by a corresponding rise in unemployment share in the 40 -49 age group from 13.7% in 1992 to 19.5% in 2010.

Figure 10: Unemployment Share by Age 1992 - 2010



Source: Ministry of Manpower, Labour Market Statistical Information

This inversion of the age share of the labour force can be accounted for by the demographic factors of falling fertility rates and rising life expectancy. With a rapidly ageing population, it is inevitable that there will be a larger proportion of older workers in the labour force. The rising life expectancy³ and absence of a national pension system meant that it is difficult for older workers to stop working at the current retirement age of 62 years as it may potentially mean 20 more years without a stable source of income. With a system of individual retirement savings account in Singapore, the onus is therefore on individual Singaporeans to ensure that there is adequate savings for their retirement. Continued employment of older workers has been difficult especially for those who are retrenched. This difficulty in securing re-employment among older workers is evidenced by the consistently low re-employment rate posted by the older cohort aged 40 years and over (see Table 5) especially following the recession years.

³ The life expectancy at 65 years for the average Singaporean is 19.9 years.

Table 5: Average Reemployment Rate of Retrenched Residents 1997-20

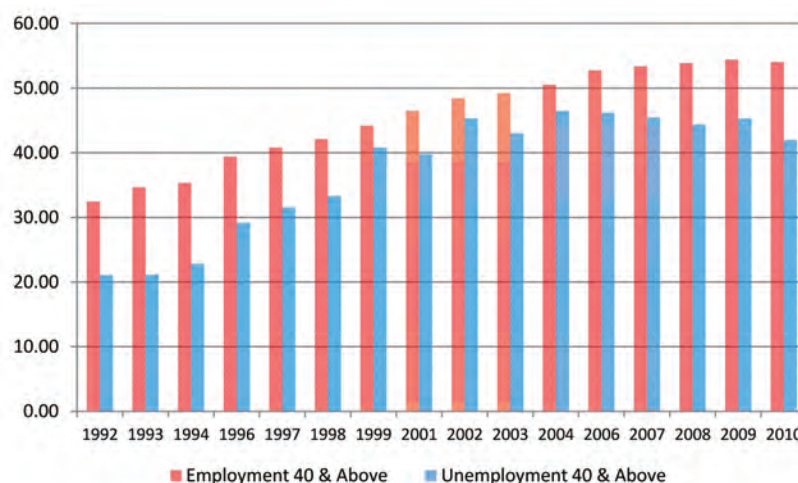
Age	97	98	99	00	01	02	03	04	05	06	07	08	08 ^a	09 ^a	10 ^a
Below 30	78.4	68.3	69.9	77.3	73.2	68.4	70.1	73.8	72.2	73.5	76.3	77.4	85.7	77.2	80.8
30-39	72.0	63.9	64.1	69.3	64.4	61.9	63.8	64.7	66.6	71.1	71.9	73.3	82.0	69.9	72.9
40-49	70.0	60.0	60.9	64.2	58.6	59.8	61.6	57.8	62.5	63.7	66.5	70.5	78.4	63.9	67.7
50 & over	58.7	49.9	49.1	52.2	43.1	51.7	56.0	44.7	51.6	58.6	52.0	59.8	68.1	51.7	52.2

Notes: a. Reemployment rate is defined as the percentage of retrenched who find employment within 6 months of retrenchment for 1997-2008. From 2008, data refers to those who find employment within 12 months. The data is based on Ministry of Manpower Labour Market Survey and Central Provident Fund records

Source: Ministry of Manpower (2007, 2008, 2010)

Figure 11 shows the rising shares of older workers in employment and unemployment with the ageing population. The decline in employability of older workers is reflected in the disproportionate increase in their share of unemployment especially in the periods following economic downturns such as those occurring in 1998, 2001 and 2003. The period following the recent 2008 global recession is uncharacteristic in that share of the older unemployed has not risen. This may be attributed to the existence of employment and wage subsidy schemes which were specially targeted at the employment of older workers.

Figure 11: Older Workers in Employment and Unemployment 1992-2010



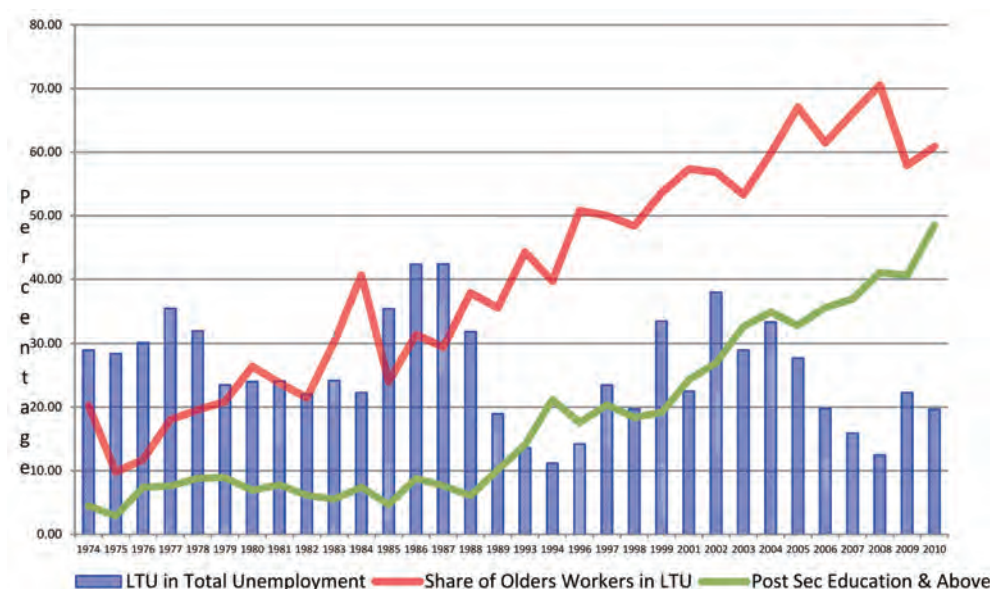
Note: Data for 1995 is not available as the Labour Force Survey was not conducted.

Source: Various Report on Labour Force in Singapore. Data for 1990 and 2000 are from the Census of Population. Data for 2005 is from the General Household Survey.

Long Term Unemployment

The predicament of older workers in securing employment is evident in their growing share of long term unemployment in Singapore (Figure 12).

Figure 12: Long Term Unemployment in Singapore 1974-2010



Note: Long-term unemployed refers to those who have been unemployed for at least 25 weeks. Data for 1990 – 1992, 1995 and 2000 are not available.

Source: Various Report on Labour Force in Singapore, data for 2005 is from the General Household Survey.

As expected, long-term unemployment rises significantly after each downturn in the economy. An examination of those long-term unemployed reveals that there is an increasing share of older workers in long-term unemployment. Since the late 1990s, older workers constituted the majority of those in long-term unemployment reaching a peak of 71% in 2008. The re-entry of older workers into the workforce thus takes a longer period of time as they often lack the necessary skills and flexibility to move to other industries. Despite the exceptional economic performance of 2007, there was a spike in long-term unemployment in older workers suggesting that older workers are experiencing structural unemployment from changes that makes their existing skills obsolete.



Key reasons by firms⁴ against hiring mature workers could be largely attributed to the perceived inability of older workers to meet the physical demands of the jobs, their inflexibility to change, their receptiveness to training and concerns over their high wage expectations. MOM labour survey indicators revealed that advancing age consistently has a negative impact on training participation. In 2010, the training participant rate in the 40 – 49 age groups and 50 -64 age group was 27.4% and 19.4% respectively. This is below the total average of 29%. Thangavelu et al. (2011) found that age had a small positive impact on training participation for workers who are under 37 years old while the effect becomes negative for older workers. This was attributed to the fact that sending senior workers for training involved higher opportunity cost or narrower time horizon of reaping the benefits out of the training. The greater reluctance to investment in training of older workers may be accounted for by numerous reasons. Firstly, employers may assume that older workers are harder to train and less adaptable to technology thus passing them over for training opportunities. Secondly, the poorer education profile of older workers may affect their confidence and willingness towards training and skills upgrading. Older workers may be further deterred by the language barrier and the pace of training.

Highly educated workers are also susceptible to long-term unemployment, with their share of long-term unemployment rising from an average 4.4 % in 1974 to 49.0 % in 2010 with graduates constituting half of these numbers.

Policy Measures

The key thrust of policies for reducing the incidence of structural unemployment in Singapore has been directed at enhancing the employability and employment of workers. These policies may be classified as demand or supply side policies.

Supply Side Policies

With Singapore's push towards a knowledge-based economy with a globally competitive and creative labour force, a premium has been placed on education and training. This structural change of the economy requires constant skills change in the workforce. The 2003 Economic Review Committee (ERC) report

4 Firm's Adoption of Age-Positive Human Resource Practices, Ministry of Manpower 2006.

of Singapore's future economic growth and development identified developing human capital as a key tool towards achieving the nation's goal. An emphasis has been placed on life-long learning as this was pivotal in ensuring that adult workers are kept abreast with changes of a dynamic economy, and are able to acquire the required skill sets.

In both recessionary and non-recessionary periods, the government has actively encouraged workers to take up courses to improve their employability. The Singapore Workforce Development Agency Act passed in 2003 led to the establishment of the Singapore Workforce Development Agency (WDA) to serve as the national body to champion workforce development in the areas of adult continuing education and training, and the facilitation of employment and re-employment. The Continuing Education and Training (CET) infrastructure which is managed by WDA provides for training at different skills levels. The Employability and Skills System (ESS), targeted at low-skilled workers, provides training in foundational employability skills in literacy, numeracy and information and communications which are portable across industries. The Workforce Skills Qualification (WSQ) System is a national skills accreditation system involving a framework of industry sector-specific technical occupational standards, courses and qualifications. The WSQ system provides the training and certification routes for workers to upgrade their skills and receive qualifications that are nationally recognised by employers in various sectors and occupations. Since the launch of WSQ in 2005, more than 600,000 workers have benefited from WSQ training conducted by some 500 WSQ Approved Training Organisations (ATOs).

The benefits of the CET came clearly into the forefront during the recent 2008-09 global financial crisis. Leveraging on the extensive network of CET, the Skills Program for Upgrading and Resilience (SPURS) was launched as part of the counter-recession efforts to help employers and workers manage the economic downturn by cutting costs to save jobs during period of low demand and equipping workers with new skills and knowledge skills in preparation for the recovery. Financial incentives were offered to companies to send employees for SPUR courses conducted by approved training providers. Companies enjoyed up to 90% government subsidies of SPUR courses and employers' absentee payroll subsidy was increased⁵ by 50%. Grants were also given to companies to subsidise the cost of recruitment, training and redesign of jobs by companies employing locals. A Professional Skills Programme

⁵ From Dec 2008, amounts of up to \$6 per hour were given for workers below 40 years old and \$6.80 per hour for those above 40 years. From May 2009, to further induce companies to send workers for training, workers above 40yrs were given up to 90% of their hourly wage subject to a cap of \$10 per hour.



Traineeships (PSPT) initiative targeted at PMETs was also introduced to develop strong PMETs' capabilities for selected sectors with good growth potentials. These traineeships serve to equip new graduates and retrenched professionals with relevant job experience to improve their employability. SPUR benefits were also accessible to the unemployed. These included the same funding support for WSQ or other certified courses at CET centres given to employers, training allowances and professional skills programmes for PMETs. As of end 2010, some 334,000 workers had benefited from SPUR at a cost of \$635 million (MOM 2011).

To tackle the problem of low participation rates of older workers and to encourage such unemployed workers to take up jobs which might be perceived as having unattractive wage offers, the Workfare Income Supplement (WIS), first introduced in 2006 as a wage bonus scheme, has become the fourth permanent pillar of Singapore's social safety net in 2007. Under the WIS, eligible older low-wage working Singaporeans above 35 years who earn an average monthly income of S\$1700 or less over a minimum 3-month period are entitled to annual income supplements which vary from S\$150 (for a 35 to 44 year old worker earning S\$1600 per month) to S\$2800 (for a worker 60 years and above earning S\$1000 per month) according to their age, monthly income and employment duration within a given year⁶. The supplements paid increases with the age category and the objective is to induce otherwise unemployed older workers to stay employed and to improve their savings to sustain their retirement needs. The Workfare Training Support (WTS) Scheme launched in 2010 to complement the WIS is specially targeted at older workers⁷ to upgrade their skills to improve employability. Courses under the WTS are recognised under the WSQ system, thereby giving older workers the needed industry qualifications recognition. WTS will reimburse employers with 90% to 95% of funding for the absentee payroll and course fee outlays. In addition, to motivate workers to go for skills upgrading, workers are offered cash grants upon completion of their training within a one-year period.

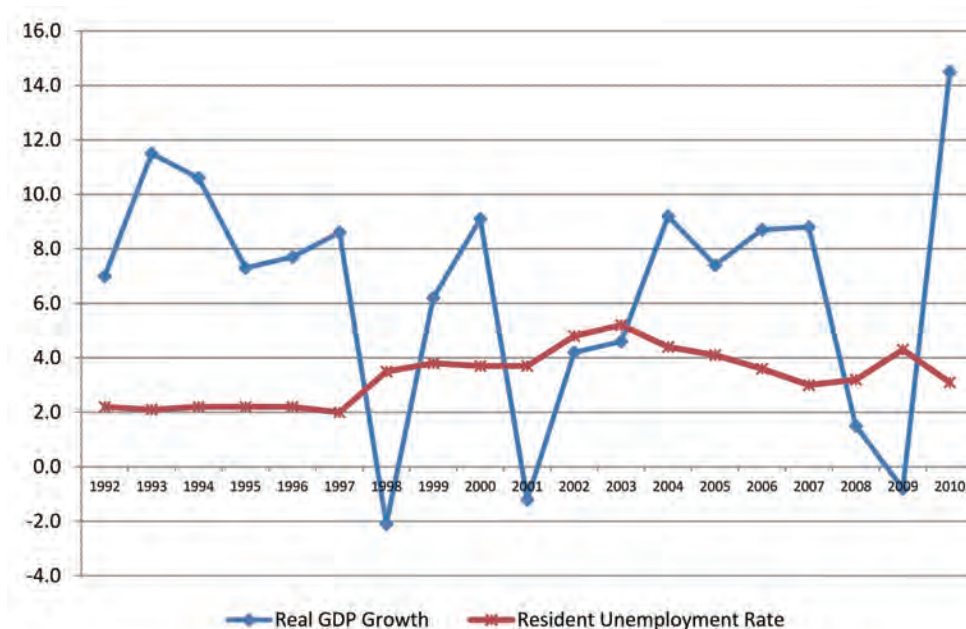
⁶ The wage supplement is paid in cash and CPF to Singapore citizens in the ratio 1:2.5 to augment both their take home pay and their retirement funds. The equivalent monthly cash component of the supplement varies from \$3.58 to \$66.70. In response to feedback on the low cash payouts and to enable low-wage workers benefit from the strong economic recovery in 2010, the Government has announced payment of one-off Workfare Special Bonus (WSB) over and above the regular Workfare Income Supplement (WIS) amounting to 50% of WIS for work done in 2010, and 25% more WIS each year for work done in 2011 and 2012.

⁷ Though targeted at older workers, younger WIS recipients (age 35 years and above) are eligible to apply.

Demand Side Policies

The SPUR program was complemented by the Jobs Credit Scheme (JCS), an S\$4.5 billion (US\$3 billion) initiative introduced in January 2009 to encourage businesses to retain existing local workers or employ new ones in the downturn through subsidising 12% of the first S\$2500 monthly wage bill of some 1.4 million local employees in 100,000 companies.

Figure 13: Real GDP Growth and Resident Unemployment Rate 1992-2010



Source: Singapore Department of Statistics SingStat Time Series

In a poll conducted by the Ministry of Manpower (MOM), 75% of the companies indicated that they postponed retrenchment or reduced the number of affected workers due to SPUR, JCS and other initiatives under the Resilience Package⁸. Figure 13 shows that despite negative 0.8% decline in real GDP in 2009, unemployment was contained by the Resilience Package implemented by the government. In the 1997 and 2001 economic crises which both saw negative real GDP growth; resident unemployment rate rose by 1.5 percentage point from 1997 to 1998, and by 1.1 percentage point from 2001 to 2002. The lag effects of recession on the labour market lasted for about two years before some recovery came into sight.

⁸ This survey was conducted in December 2009. Source: <http://app2.wda.gov.sg/web/Contents/Contents.aspx?ContId=8> accessed 28 Sept 2011.



In contrast, in the recent global recession which had its beginnings in late 2008, resident unemployment rate increased by 1.1 percentage point from 2008 to 2009. But this was followed by a rapid recovery with resident unemployment rate falling by 1.2 percentage points from 2009 to 3.1% in 2010.

Another measure to augment employment opportunities for older workers is by raising the statutory retirement age. According to a survey by the Ministry of Manpower, about a quarter of private sector firms in Singapore require their workers to retire at the statutory retirement age despite the fact that a fifth of these firms have prospects to rehire these workers (Ministry of Manpower, 2007a). Due to poor private sector response to voluntarily raise it, the statutory retirement age has been raised from 55 years to 60 years through the enactment of the Retirement Age Act in 1993. The official retirement age was further raised to 62 years in 1999 along with cost cutting measures such as a reduction in employers' CPF contribution rate and a wage reduction of up to 10% for workers above 60 years. A pivotal boost to enhancing older worker employment is the Retirement and Re-employment Act (RRA) to be introduced in 2012 to provide for re-employment of older workers beyond 62 years. The legislation stipulates clear re-employment and retirement guidelines to employers and employees thus ensuring that the rights of both involved parties are fairly protected. Under the re-employment law, employers will be required to offer re-employment or an Employment Assistance Payment (EAP) for those unable to re-employ, to eligible employees reaching the age of 62 for up to 65 in the first instance and, later, up to 67. However, instituting higher retirement age may have negative consequences such as creating reluctance on the part of employers in recruiting mature workers for fear of having to retain them for extended periods.

Other demand side programmes that are aimed at increasing job opportunities for unemployed workers include the Job Re-creation Programme (JRP). Funded by WDA and implemented in partnership with the trade union movement, the JRP involve the re-design and re-creation of existing low wage jobs to improve working conditions, enhance job image and increase productivity and job worth. In the 2011 Budget Initiatives a one-off Special Employment Credit (SEC) Scheme to support older workers hiring was launched. The SEC will last for three years and will be paid to employers of Singaporean employees aged 55 and above who earn less than \$1700. Under the SEC, employers will receive a SEC of up to 50% of employer CPF contributions, or up to \$33 for employees age 55 to 59. For each employee age 60 and above, employers will receive SEC of up to 80% of employer CPF contributions or up to \$35. This is an effort to boost demand for mature workers and to help employers to adjust to the re-employment legislation.

Immigration Policy

The recent recession episode in Singapore has shown that matured residents with tertiary education faced the highest risk of job displacement and lowest probability of reemployment. This is unlike previous recessions where the lower educated workers were the most vulnerable. In 1999, for example, out of the 75,000 residents who were unemployed, those with post secondary & higher education constituted 28% while those with below secondary education comprised 44% of the unemployed. In 2009, the corresponding figures for the more highly educated increased to 48% while that of the less educated has dropped to 28%. This represents an inversion of the educational attainment/skills composition of the unemployed. The share of graduates among the unemployed has doubled from 12% in 1999 to 25% in 2009 and the share of older workers (40+ years) among the unemployed has increased from 40% to 45% and for those 50+ years from 15% to 24%. In the light of these developments, there has been strong resentment to the continued influx of foreign labour into the economy. Strong pressure has surfaced from the ground for policy change that will tighten the inflow of foreign labour in order to facilitate the employment of displaced local labour and reduce the competition for jobs. The success of new opposition candidates' election to Parliament in the recent general election has been attributed to the displeasure over government policies that led to the increased numbers of foreign workers which rose by 513,000 or 53% of total new employment between 2004 and 2010.

With falling fertility rate and a rapidly ageing population, Singapore cannot afford to sustain growth without the intake of migrants as the small domestic population cannot provide all the required skilled manpower needed. However, increasing Singapore's population by 1 million every decade as had been done in the past 2 decades is clearly an unsustainable policy given its already very high population density and small land area. What is needed is a more sensible and measured pace of migrant intake that is focused on skilled labour intake that does not generate excessive pressures on space and essential services which impose unnecessary high external costs of adjustment on the rest of the population. Recent changes in the foreign worker policies through increases in the foreign worker levies and in administrative tightening of applications seem to be moving in the right direction. The increases are particularly steep for S-Pass category foreign workers (for mid-level skilled professionals & technicians) as the levy is raised from \$50 in 2010 to \$300 - \$450 by 2013. By reducing the supply of foreign labour, this may help mitigate the unemployment situation in the "sandwiched class" (Singaporeans with post-secondary/ diploma qualifications).



Concluding Remarks

The Asian financial crisis in 1997 ended two decades of exuberant growth in the region and ushered in a period of harsher economic reality that required Singapore to re-strategize its economic growth plans. Rapid rate technological change and globalization have resulted in major structural changes in Singapore's economy. A discernable trend has emerged for unemployment in Singapore. The unemployment rate which used to hover around 2% in the 1990s had climbed to a new average of 3.9% in the past decade. A rapidly ageing labour force has led to older workers who are aged 40 years and above shouldering a dominant share of total unemployment. Of greater concern is the disproportionate share of these older workers in the long-term unemployed pool reflecting the lower re-employment rate of retrenched older workers. There is also the increasing share of the more highly educated among the unemployed. These unemployment trends in Singapore strongly support the need for a rethink of its liberal foreign labour policy where low wage depression effect has caused problems for employment of low- wage workers and the influx of skilled foreign talent seem to have led to displacement of local graduates and older PMETs. Unemployment of older worker is set to become an increasingly important issue as Singapore labour force ages. Schemes that improve labour quality of older workers and a long-term commitment to programmes that encourage older workers to take up skills training will have to be a vital component of the efforts by the government to boost older worker productivity and employability to sustain future economic growth.

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