The Asian Financial Crisis, Economic Recession, and Structural Change in Hong Kong

Yue-Chim Richard Wong*

Faculty of Business and Economics, The University of Hong Kong

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Abstract

This article studies the interplay of two factors that has an important bearing on the nature of deflationary pressure and its persistence in Hong Kong since 1997. These two main factors are (1) a sharp and protracted downturn of the business cycle, and (2) structural change of the economy in response to the opening of China and its gradual integration with Hong Kong.

We develop a theoretical framework for interpreting the post-1997 deflation that can also be applied to the understanding of the decade of inflation that preceded the onset of the Asian Financial Crisis and the subsequent global economic slowdown.

We cite evidence that demonstrates the deflation in Hong Kong can be explained primarily by cyclical factors. The persistence in deflation should not be interpreted as a result of structural transformation of the Hong Kong economy resulting from closer integration with Mainland China. The price convergence process resulting from the economic integration with the Mainland will continue for a considerable period of time. It will, however, exert only a minor dampening effect on the average price level in Hong Kong given its slow moving process.

1. The Changing Structure of the Economy

The Hong Kong economy has demonstrated a remarkable capacity to adapt to external change during the past 50 years. At each stage of its economic evolution, Hong Kong has risen to the challenges of changing global conditions and succeeded in making the economy work. The economy evolved from being an entrepot trading centre for China during the immediate postwar period into an export oriented light manufacturing industrial city during the 1950s and 1960s. In the 1970s, the Hong Kong financial sector started as a local commercial banking community only to emerge as one of the largest financial centres in the world. In addition, during the 1970s Hong Kong became a leading tourist destination in the Asia-Pacific region. In the 1980s, with the advent of China's open door policy, Hong Kong

* Tel.: +852-28577600; fax: +852-25476789.
Email address: rycwong@fbe.hku.hk

has reemerged as the premier entrepot trading centre serving not only China but the entire Asia Pacific region.

Since the mid-1980s, the Hong Kong economy has begun evolving in an entirely new way because of new economic links with China and the Asia-Pacific region. The shift of Hong Kong manufacturing investment out of Hong Kong, particularly to the Pearl River Delta area in Guangdong Province of China, has been substantially completed by the mid-1990s. The most remarkable change about Hong Kong is that, as a functional economic region, it now extends well into the entire Asia-Pacific region but most prominently South China. No longer is Hong Kong simply a city-nation economy. With the extensive investment by Hong Kong manufacturers and other entrepreneurs in South China, the Hong Kong economy is now functionally articulated with South China.

The changing structure of Hong Kong's economy is reflected in the shifting shares of the manufacturing sector relative to services in total GDP. The share of manufacturing in total GDP declined from about 20 per cent in the mid-1980s to about 5 per cent in 2000. At its height in 1970, manufacturing had accounted for 31 per cent of Hong Kong's GDP.

The rapid growth of the service sector testifies not only to the continual expansion of Hong Kong as a major financial centre in the Asia-Pacific region, but also the re-emergence of Hong Kong as an entrepot for China trade and as a service centre for export orientated production in South China's vast hinterland. Hong Kong's service sector grew from about 70 percent of GDP in the mid-1980s to nearly 85 per cent in 2000. In a previous study, Tao and Wong (2002) showed that the growth of the service sector is almost entirely accounted for the producer services (or intermediate services) instead of final consumer services.

The growth of producer services in Hong Kong reflects the growing integration of Hong Kong's economy with the rest of the region and especially the Chinese hinterland. These producer services support primarily the manufacturing production base that has migrated offshore. The process has taken place to a much greater extent in Hong Kong than Singapore. Tao and Wong (2002) had estimated that Hong Kong's producer services sector had expanded from 40.6 per cent to 50 per cent of GDP from 1987 to 1997. The figures for Singapore had remained unchanged at about 40 per cent.

The change is also reflected in the different structure of exports in the two economies. The proportion of re-exports in total exports had risen from 60 per cent to 77 per cent from 1987 to 1997 in Hong Kong. In Singapore, the proportion of re-exports in total export had remained unchanged at about 40 per cent over the same period.

The openness of Hong Kong in trade has always been well known, but until recently little is known of the Hong Kong's external assets and the amount of foreign investments and funds that have been attracted to Hong Kong. The Census and Statistics Department (June 2002) has recently made available estimates of Hong Kong's international investment position, external debt and portfolio investment statistics for the first time.

Hong Kong's external assets amounted to US$1,083 billion (669 per cent of GDP) as at end-2001. Foreign investments and funds attracted to Hong Kong amounted to US$797 billion (492 per cent of GDP). The net external assets amounted to US$286 billion (177 per cent of GDP) are among the largest in the world.

Hong Kong today is China's foremost partner in commodity trade, tourist trade, direct foreign investment, and loan syndication. Besides trade and investment, Hong Kong facilitates China's open door policy in many indirect ways. Hong Kong serves as a contact point, a conduit of information and technology transfer, and a market and production training ground.

Hong Kong by allowing market forces to drive its economy is assuming characteristics similar to that of other metropolitan economies like New York (see Table 1 below). Both Hong Kong and New York have a preponderance of producer services. The growing importance of producer services in Hong Kong and New York City reflects an economic process at work that is crowding out lower value added activities, such as the physical production stages of manufacturing, to the hinterland. Over time, manufacturing gradually plays a less important role in the city's GDP and employment, even though it continues to function as the management and coordination center for a manufacturing base that has been decentralized to other places. This new dimension of the Hong Kong economy represents both opportunities and difficult challenges for Hong Kong in the next evolutionary phase of its economy.

Table 1 about here

2. The Asian Financial Crisis and Economic Recession

As a metropolitan economy, Hong Kong is subject to the same economic dynamics faced by other cities like New York, London and Tokyo. It is economically less vulnerable to the rise and demise of any specific economic sector, but is sensitive to a general economic contraction such as the current situation in East Asia.

The Asian region was hit by two successive negative macroeconomic demand shocks in the past 5 years: the Asian Financial Crisis started in 1997 and the global economic slowdown in 2001. The regional and global economic environment has led to a general macroeconomic downturn in Hong Kong. Given the linked exchange rate system in Hong Kong, where the local currency is unified with the US Dollar through a currency board arrangement, cyclical deflationary pressure has appeared.

For this reason the economic downturn in Hong Kong at this time is particularly severe and is unlikely to rebound until the rest of East Asia starts moving again. Hong Kong is therefore less likely to repeat its previous records of rapid recovery this time. Singapore's somewhat greater presence of export oriented manufactured products may therefore improve its recovery speed when compared with Hong Kong.

The general price level in Hong Kong started to fall in October of 1998. Since then the price level has fallen by a cumulative of 12 percent, bringing the average consumer prices back to their 1995 level. Deflation has persisted for more than 3 years, and is generally expected to continue in the near term.

The dominant part of the current deflation can be accounted for by the bursting of the property bubble triggered by the contagion effects of the Asian Financial Crisis. About half of the drop in the CPI can be accounted for by the housing component. Property prices have dropped by more than 50 percent since the peak in 1997, and rental by about 20 percent (see IMF 2002). The bursting of the property price bubble following the onset of the Asian Financial Crisis is an important cause of cyclical deflation. The damaged balance sheets of many companies and households contributed to the persistence of the deflation cycle through a negative effect on consumption.

One third of the drop in the CPI can be accounted for by three other components of the CPI, namely food, clothing and footwear, and durable goods (see IMF 2002). The drop in import prices has also been a contributing factor in the fall of consumer prices. Between 1998 and 2001, import prices declined by 12 per cent, reflecting a 10 per cent appreciation of the nominal effective exchange rate index.

Hong Kong is not alone in suffering from deflation. China, Taiwan, Singapore and Japan are also facing falling prices. Inflation in Asia, excluding Japan, dropped from close to 20 per cent in 1994 to around 2.5 per cent in 2001 (see Fung, Ma and McCauley 2002).

The current persistent drop in consumer prices is unprecedented in the postwar history of Hong Kong. The concomitant asset price deflation induced by the two successive external negative shocks is the dominant factor responsible for the persistence in the drop of consumer prices. Between 1997 and 2000, net private housing equity has dropped by more than 50 percent, and this factor alone can explain more than half of the decline in private consumption, according to a study (see Hong Kong Monetary Authority, May 2001). Many households have to struggle with the problem of negative equity of their property.

The overall performance of the stock market has also been disappointing. In particular the bursting of the Internet asset bubble have wiped out a considerable proportion of asset wealth of the local population and therefore further dampened the incentive to consume. The shrunken net worth dampens the credit-worthiness of firms, thus reducing banks' willingness to lend. The uncertain economic outlook has also hampered private investment spending. The balance sheets of the private sector have sharply deteriorated over the past 5 years, and this takes time to repair. The persistence of deflation has led the general public to form deflationary expectations, thus further weakening the already depressed level of local consumer and investment spending. The negative outlook on prices implies higher expected real interest rates.

3. The Need for a Theoretical Framework

The interplay of two factors in Hong Kong has an important bearing on the nature of deflationary pressure and its persistence in Hong Kong since 1997. These two main factors are (1) a sharp and protracted downturn of the business cycle, and (2) structural change of the economy in response to the opening of China and its gradual integration with Hong Kong. What is the respective importance of cyclical versus structural factors in explaining deflation and its persistence in Hong Kong is of great interest in helping us understand when deflation will end.

To resolve this question it is necessary to develop a theoretical framework for interpreting the current deflation is scientifically meaningful if it can also be applied to understand the decade of inflation that preceded the onset of the Asian Financial Crisis and the subsequent global economic slowdown.

Our approach is to think of the Hong Kong economy as being composed of two sectors. One sector produces tradable goods (and services) and another sector produces non-tradable goods (and services). In the decade from the mid-1980s to the mid-1990s manufacturing operations were moved across the border and greatly expanded their scale of operation. Two effects took place in Hong Kong.

First, the manufacturing sector in Hong Kong experienced a huge increase in productivity relative to the rest of the economy, primarily the service sector. Since manufactured goods are predominantly tradable goods and many services are often non-tradable, one can usefully think of the Hong Kong economy as having experienced faster productivity growth in tradable goods relative to non-tradable services. Prices of non-tradable (P_N) services rose relative to tradable goods (P_T). Under the linked exchange rate (e), prices of tradable goods have to rise or fall in tandem with world prices; therefore, the domestic price level in Hong Kong (a combination of tradable goods and non-tradable services) began to rise faster than world prices. This is the cause and nature of structural inflation in Hong Kong. Structural inflation results from rising demand for non-tradable services that have to be domestically produced.

The situation is depicted in Figure 1, where the point (P,C) denotes the original production and consumption bundle before the production possibility frontier (NT) shifted to (N'T'). After the shift the new production and consumption bundle occurs at point (P"C"), where P_N/eP_T has risen.

Figure 1 about here

Second, returns from assets invested across the border in south China resulted in a substantial rise in the incomes of Hong Kong residents above their domestically produced incomes. Part of the income arising from external sources had to be spent on non-tradable domestically produced services thereby further fuelling structural inflation.

The situation is depicted in Figure 2, the increase in income from net external assets leads to an increase in income from I_1I_1 to I_2I_2. This is equivalent to a shift in the production possibility frontier from (NT) to (NT*). The equilibrium production and consumption bundle shifts from point (P"C") to (P*C*), and P_N/eP_T rises further. Structural inflation is therefore exacerbated.

Figure 2 about here

As a corollary consumption spending in Hong Kong would therefore rise faster than GDP during inflationary periods. This contradicts the conventional economic wisdom that consumption rises more slowly than GDP during an economic boom, because investment typically grows faster in a boom period compared with consumption. Chart 1 shows that in the decade from the mid-1980s to the mid-1990s the ratio of consumption to GDP was indeed rising.

Chart 1 about here

Since, residential property is generally considered as a non-tradable service and could certainly considered to be so during this period. It is therefore logical to find property price inflation to happen during this period. No doubt and inevitably market speculation in properties further fuelled property price inflation.

By the mid-1990s the expansion of manufacturing activities across the border was slowing, consequently structural inflationary pressure was eased. With the onset of the Asian Financial Crisis in 1997 and the subsequent global economic slowdown in 2001, the returns from assets invested externally also fell. Falling interest rates that took place later, and especially when the global economic slowdown emerged, is a good indicator of the declining returns from external incomes.

Recent estimates by the Census and Statistics Department (2002) of the net external assets of Hong Kong puts it at 138 per cent of GDP in 2000 and 177 per cent of GDP in 2001. Consider a decline in the interest rate by 3 per cent. This would imply a decline in income from net external assets equivalent to about 4.1 per cent in 2000 and 5.3 per cent in 2001. These are huge declines in incomes and would obviously have a significant negative impact on domestic consumption of non-tradable services.

It is important to note that the deflationary pressure caused by the decline in income from net external assets is not a simple case of structural deflation. The decline in income from net external assets is cyclical in nature and stems from the regional and global recession that started in 1997. The effect of this recession on Hong Kong is amplified by virtue of the very large net external assets of Hong Kong. This feature of the Hong Kong economy means that the effects of regional and global business cycles exacerbate the volatility of the economy.

The framework can also be used to understand the implications of the “Gortex border” between Hong Kong and the Chinese Mainland on structural inflation. The term “Gortex Border” depicts the constitutional arrangement defining Hong Kong’s relationship with the Chinese Mainland in “one country two systems”, where Hong Kong residents are free to travel to the Mainland, while Mainland residents are severely prohibited from coming to Hong Kong.

As the south China economy continue to develop there is a growing incidence of Hong Kong residents crossing the border to purchase a variety of consumption goods and services that were previously consumed domestically as non-tradable goods (see report by the Business and Professionals Federation of Hong Kong, January 2002). This phenomenon can be interpreted as a two-fold change. First, the ease of crossing the border from Hong Kong into the Mainland had transformed some non-tradable goods into tradable goods through a neighborhood effect. Second, this neighborhood effect reduced the demand for non-tradable goods in Hong Kong and resulted in a decline in their prices thereby contributing to structural deflationary pressures.

The situation is depicted in Figure 3, where in income line shifts from I_1I_1 to I*I*. The production and consumption bundle changes from point (P”C”) to point (P) and point (C). The latter two points do not coincide and reflect the “odd” situation where it is possible to import non-tradable services for consumption.

Figure 3 about here

This process of structural deflation will stop when it is no longer economically worthwhile to engage in cross border consumption of this kind. This happens partly because prices across the border will rise over time. The process will also slow down with productivity gains in non-tradable goods that will lower their prices.

Structural deflation of this sort may hurt the interests of those engaged in the production of non-tradable goods in Hong Kong, but they are positive for the economy as a whole because it allows the population to consume these goods at a lower price.

It is worth noting that the movement of production operations (both manufacturing and services) into China creates structural inflationary pressures that are opposite to the neighborhood effect of crossing the border for consumption purchases. Economic integration and the resulting structural change create both deflationary and inflationary pressures. It is likely that prior to the mid-1990s inflationary pressures dominate, but in the current environment deflationary pressures dominate.

Enhancing the flow of Mainland visitors into Hong Kong for tourism, work or residence would increase the demand for non-tradable goods in Hong Kong and would generate pressures for structural inflation. If the flow is sufficiently large then it could well dominate the deflationary pressures arising from cross border consumption activities.

The situation is now depicted in Figures 4a and 4b. In Figure 4a we show an outward shift in income line as reflected by an increase in demand arising from the influx of Mainland residents. In Figure 4b we show that the final equilibrium situation would occur at point (P) for production and at point (C) for consumption, prices of non-tradables have risen relative to tradables.

Figures 4a and 4b about here

The integration of Hong Kong with China has made it more convenient for companies to move their operations across the border. This effect by itself leads to structural inflation as was witnessed in the decade before the Asian Financial Crisis. The property bubble had been fueled by rapid productivity growth in the tradable sector and exacerbated by speculative activities. However, when the structural change is combined with a severe regional and subsequently global recession it can also be deflationary as returns from overseas assets fall. Consumption and even investment can therefore be negatively impacted.

In addition, the gradual and continued opening of China has contributed to structural deflationary pressures in Hong Kong because it is now more convenient for households to consume across the border.

4. Price Changes: Cyclical Versus Structural

The interplay of structural and cyclical factors has led to more extreme movement in price changes. An economic boom in the rest of the world fuels inflation in Hong Kong through a higher rate of inflation in imported prices, structural inflation through rising incomes from external sources that boost the demand for non-tradables, and more rapid relocation of production facilities out of Hong Kong. The reverse occurs when economic recession occurs in the rest of the world. Such an adjustment process is reflected in key macroeconomic indicators over the three periods: 1987-92, 1992-97 and 1997-2001 (see Table 2 below).

Table 2 about here

The first two periods experienced rapid economic expansion and inflation when production facilities were relocated away from Hong Kong. In the last period economic recession had set in and deflation appeared. It was also a period where relocation of production facilities out of Hong Kong had slowed down and when cross border consumption patterns began to emerge more prominently.

To what extent is deflation in Hong Kong a result of structure factors as opposed to cyclical factors?

According to a recent study (see Hong Kong Monetary Authority, April 2002) based on 300 products, the average price differential between Hong Kong and 4 Mainland cities, namely Shenzhen, Guangzhou, Shanghai and Beijing, was estimated to be around 20 per cent in 2001, tends to reduce the overall price level in Hong Kong by less than 0.5 per cent over a one-year period. Prices in Hong Kong and the four Mainland cities have been converging, albeit very slowly. The existing price differentials would be reduced by half in 6.5 years on the average.

Another recent study (see International Monetary Fund, May 2002), using the ratio of the consumer prices indices in Hong Kong and Shenzhen as a measure of the average price gap, suggests that the price level gap plays only a minor role in explaining the deflation in Hong Kong. Cyclical factors, as proxied by unemployment rate, credit growth and the nominal effective exchange rate, are much more important determinants of deflation in Hong Kong.

The studies by the International Monetary Fund and the Hong Kong Monetary Authority suggest that deflation in Hong Kong can be explained primarily by cyclical factors. The persistence in deflation should not be interpreted as a result of structural transformation of the Hong Kong economy. This view does not appear to be firmly supported by empirical evidence. Indeed the low returns from the very large net external assets of Hong Kong and the bursting of the property market bubble are more proximate causes of the current deflation, and both are primarily related to the business cycle effect. Although one could argue that these effects might have been exacerbated through its interaction with structural factors.

In a study by the Hong Kong Monetary Authority (March 2002) output gap was estimated using annual data from 1976 to 2000. Their findings show that it takes 1 to 2 years for an output gap to move from its trough to zero. Using their estimates we are able to forecast that prices will start to rise again in 2003 provided that import prices are stable or increasing. If import prices continue to fall then deflation in Hong Kong would continue into 2003.

What these forecasts indicate is that they provide quantifiable estimates that the current deflation is primarily cyclical in nature. Deflation in Hong Kong can be readily corrected if the global economic recession ends and the economy start to pick up. Given the empirical evidence, it will take one to two years for consumer prices to stabilize. As the global economy recovers, as the US currency weakens, and as import prices cease to fall the prospect of deflation ending soon is likely to be good.

The price convergence process resulting from the economic integration with the Mainland and structural economic transformation of thong Kong will continue for a considerable period of time. It will, however, exert only a minor dampening effect on the average price level in Hong Kong given its slow moving process.

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