IS IT TIME TO REVISE OR REMOVE THE HK$/US$ PEG RATE?

A REVIEW AND ANALYSIS

by

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RESEARCH REPORT

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ABSTRACT

The year 1986 is a very prosperous year for the exports of Hong Kong. Following the depreciation of the U.S. Dollar in the year, the Hong Kong Dollar has depreciated by 30 percent to 40 percent against most other major trading currencies under the link exchange rate system which was implemented by the Hong Kong Government in October 1983 as a major step in the stablization of the Hong Kong Dollar. After three years' operation of the pegged exchange rate, there were several occasions where the Hong Kong people anticipated that the Hong Kong Government would amend the pegged HK$/US$ exchange rate though the Hong Kong Government had manipulated the interest rate of Hong Kong to bring the market exchange rate of U.S. Dollar to the level of the pegged rate of HK$7.8/US$ in all cases.

The opinion of the general public on the pegged exchange rate varied greatly though most people considered that the Hong Kong Dollar was under-valued if only the economic performance of Hong Kong and U.S. were taken into consideration. According to the Balance of Payments Model which takes the trade

balance of Hong Kong and the United States as the basis of estimating the exchange rate, the exchange rate of the U.S. Dollar as at 31st August 1986 is estimated to be HK$5.1999/US$ to HK$5.8859/US$ which is significantly lower than the pegged exchange rate. If this is the case, the Hong Kong Dollar was under-valued by at least HK$2 under the pegged exchange rate system.

In a survey on the opinion of medium-sized business in Hong Kong, it is the general view that the Hong Kong economy was benefited from the steady exchange rate and weakened U.S. Dollar in the past few year. Most companies considered the Hong Kong Dollar as under-valued but they did not anticipate the Hong Kong Government would amend the pegged rate as stability is the most important concern for the economy of Hong Kong and they would not welcome the amendment.

As the Hong Kong Government has demonstrated its determination to maintain the pegged rate, it would be logical to believe that the pegged rate will not be removed or revised in the near future. However, if the U.S. Dollar continues to depreciate further in the foreign exchange market, Hong Kong will ultimately suffer from high inflation rate and other defects may appear. Under such circumstances, the Hong Kong Government should re-consider to revise or remove the pegged rate.

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My appreciation is also extended to several colleaques and friends who have assisted in the distribution of questionnaires.

Needless to say, I alone am responsible for the views expressed in this report, and for whatever factual and analytical errors that may exist.

Hong Kong
May 1985

Yan Chi-wai

CHAPTER I

INTRODUCTION

In the year 1986, the Reagan government, in light of the huge trade deficit in the past year, adopted a policy to depreciate its currency in the international foreign exchange market against the other major currencies. The advantages of the depreciation of the U.S. Dollar are of two folds. Firstly, the depreciation of U.S. Dollar would cause the imported goods to become more expensive and thus would reduce the demand for imported goods. The local people are encouraged to use U.S. made products. On the other hand, exports of the U.S. products become cheaper and thus the U.S. products would be at a better competitive position than before. This feature would help to regulate the huge trade deficit in the past years. Since the U.S. government has adopted this policy, the U.S. Dollar depreciated greatly in the year 1986. The exchange rates of U.S. Dollar against Japanese Yen and Deutsche Mark during the period November 1985 to October 1986 are shown in Figure 1.1 and Figure 1.2[1].

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1 Reuter Monitor Graphics

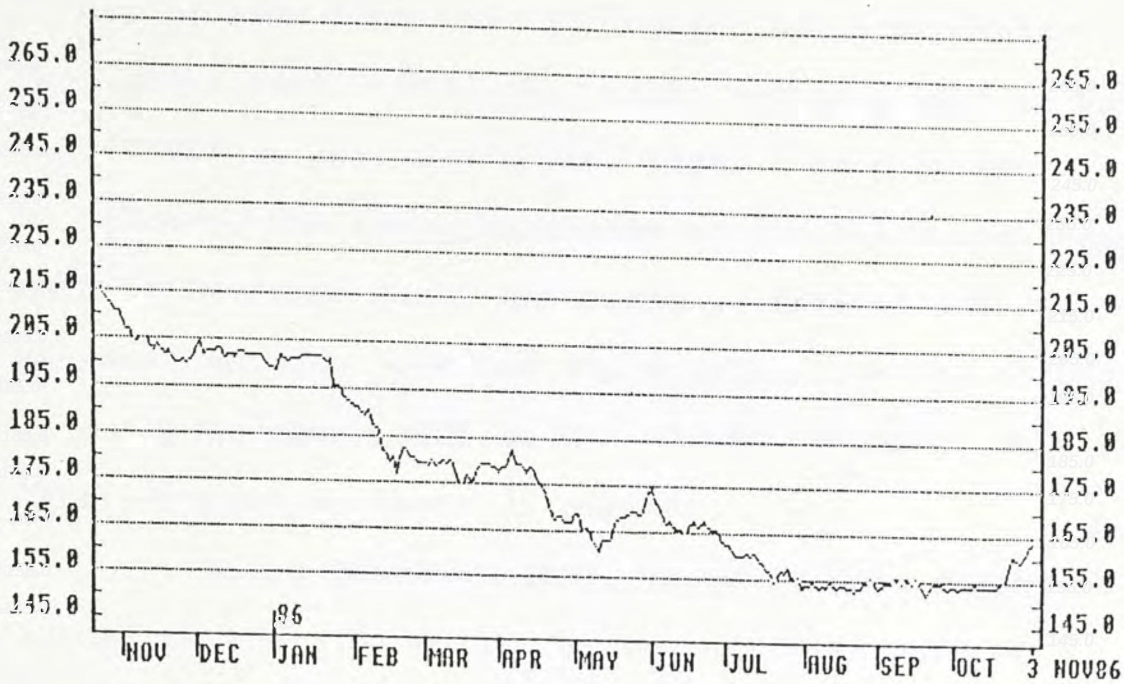

Figure 1.1 Exchange Rate of Japanese Yen per U.S. Dollar

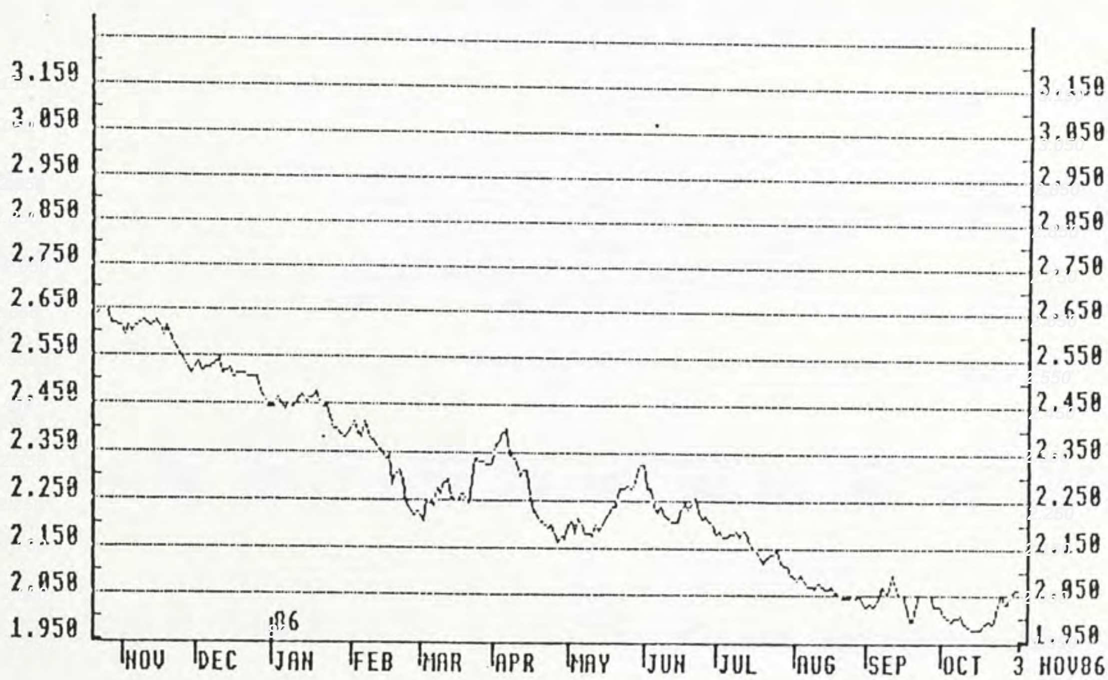

Figure 1.2 Exchange Rate of Deutsche Mark per U.S. Dollar

It can be seen that the U.S. Dollar had depreciated from about Yen215/US$ as at early November 1985 to about Yen149/US$ in end of October, 1986, a drop by about 30 percent. The same phenomenum occurs for the exchange rate of Deutsche Mark. The exchange rate of U.S. Dollar against Deutsche Mark has depreciated from DM2.65/US$ in early November 1985 to DM1.97/US$ by end of October, 1986, dropped by about 25 percent.

Since October, 1983, the Hong Kong Dollar is linked to the U.S. Dollar at the official rate of HK$7.8/US$. The depreciation of the U.S. Dollar in the year 1986 has an identical effect on Hong Kong Dollar. The exchange rates of Hong Kong Dollar against Japanese Yen and Deutsche Mark for the period November 1985 to October 1986 are shown in Figure 1.3 and Figure 1.4[2].

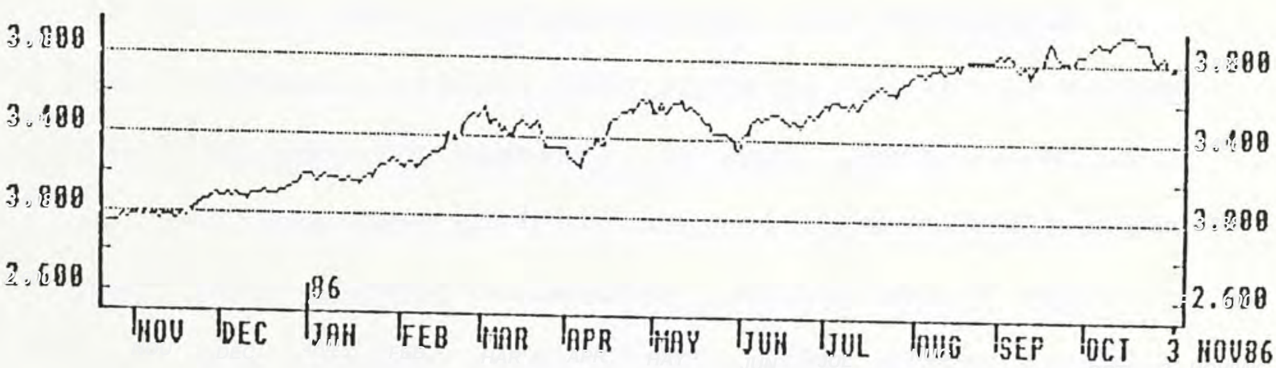

Figure 1.3 Exchange Rate of H.K. Dollar per Deutsche Mark

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2 Reuter Monitor Graphics

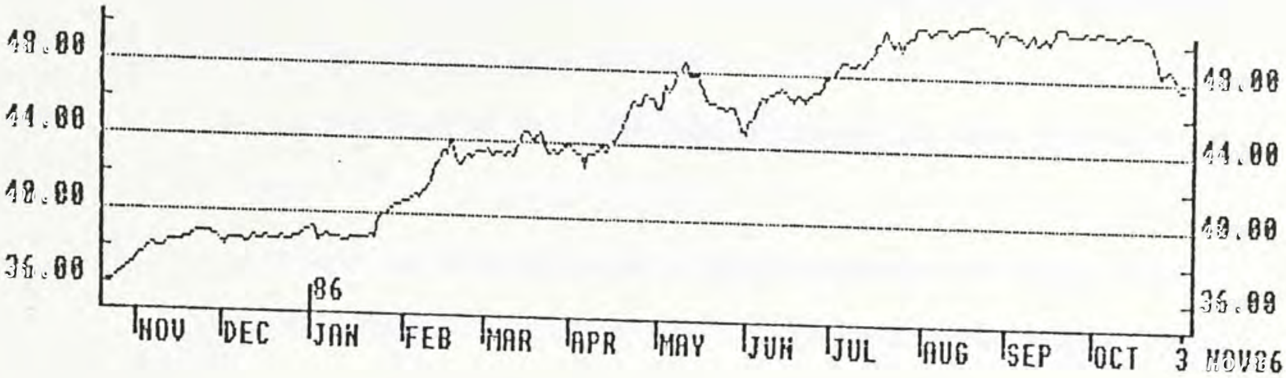

Figure 1.4 Exchange rate of H.K. Dollar per JPY1,000

As can be seen from the graphs, the trends of the exchange rates of Japanese Yen and Deutsche Mark repeat the trend of the U.S. Dollar. The exchange rate of Hong Kong Dollar against Japanese Yen has dropped from HK$0.036/Yen in early November, 1985 to HK$0.051/Yen by end of October, 1986, a drop by about 42 percent. The exchange rate of Deutsche Mark also appreciated from HK$2.97/DM in early November 1985 to HK$3.90/DM by the end of October, 1986, by about 31 percent. In 1987, the U.S. Dollar and the Hong Kong Dollar continued to depreciate against most major trading currencies. At the end of April, 1987, the exchange rates of Hong Kong Dollar against Japanese Yen and Deutsche Mark depreciated further to HK$0.056/Yen and HK$4.37/DM respectively.

In light of the sharp depreciation of the Hong Kong Dollar, there were rumours in the marketplace in recent few months that the Hong Kong Government would amend the official rate between Hong Kong Dollar and U.S. Dollar upwards so as to better reflect the actual value of the HOng Kong Dollar.

Specifically, the objectives of the present study are:

1. A review on the economic performance of Hong Kong and the United States in the past three years with particular emphasis on the effect of the depreciation of the Hong Kong Dollar in 1986 on the business of Hong Kong.
2. To estimate the intrinsic value of the Hong Kong Dollar.
3. To obtain the views of medium-sized business in Hong Kong on the effect of the peg rate system on their business in the past year.
4. To obtain the general opinion of their preference whether to revise or remove the peg rate and their action to be taken if the HOng Kong Government is prepared to implement such action.

The Hong Kong Dollar, followed the depreciation of the U.S. Dollar in 1986, enjoys the same benefits as the U.S. Dollar, i.e. it prohibits imports and encourages exports. The year of 1986 was a prosperous year for the exporters of Hong Kong, especially the European market whose demand has been weak in the past few years, recovered quite rapidly partly due to the strengthening of their currencies. Though a major portion of materials for manufacturing are imported, the weakened Hong Kong Dollar provided an opportunity for the Hong

Kong exporters to recover the price edge among other Asian countries, such as Taiwan, Singapore and South Korea which had been the major competitors in the export markets in the past few years.

However, there are places in the World, such as Hong Kong, Taiwan, South Korea and Singapore, where their currencies are linked with the U.S. Dollar, either formally or informally. There were pressures from the U.S. government on Hong Kong Dollar, Taiwanese Dollar, Korean Won and Singapore Dollar to appreciate their value against the U.S. Dollar as increasing imports from these countries are resulted. South Korea and Taiwan have gradually appreciated their currencies under the pressure from the U.S. government. There were also rumours in the marketplace in recent few months that the Hong Kong Government will amend the official rate between Hong Kong Dollar and U.S. Dollar upwards so as to better reflect the actual value of Hong Kong Dollar though the government officials denied this move in various occasions. Since early December, 1986, the creditability of the Reagan government deteriorated due to the crises of arm sales to Iran and aid to guerilla in Nicaragua. These crises caused the U.S. Dollar to weaken further and the market rate for the U.S. Dollar against Hong Kong Dollar has dropped quite significantly from HK$7.8/US$ in the period 1st December, 1986 to 10th December, 1986. This fact further magnified the belief that the Hong Kong Government would revise the official rate upwards.

On 14th January 1987, the exchange rate of the U.S. Dollar dropped to a low HK$7.763/US$ and further depreciation of the U.S. Dollar was anticipated. A lot of businessmen and the people in the marketplace started to worry about the amendment of the pegged rate again. People started to sell U.S. Dollar in the forward market so as to protect their profits/income in the next six months. When the rumours of re-pegging of the Hong Kong Dollar was at its peak, the Hong Kong Association of Banks decided to reduce all deposit rates offered by banks by a range of three quarter percent to one percent in the morning of 15th January 1987. On the same day, The Hong Kong & Shanghai Banking Corporation and Standard Chartered Bank jointly announced that the prime lending rate is also reduced from 6½ percent to 5 percent. The new prime lending rate was the lowest in the past ten years. The Financial Secretary said that the main purpose of the reduction of the interest rate was to reduce speculation in the market and to demonstrate the determination of the Hong Kong Government to maintain the peg rate at HK$7.8/US$. The foreign exchange market responded to the lowering of the interest rate and the exchange rate of U.S. Dollar raised to a level of HK$7.76/US$ on the same day and gradually returned to the level of HK$7.8/US$. Though the Hong Kong Government has successfully maintained the exchange rate of U.S. Dollar through manipulation of the interest rate, many people in the marketplace still believe that the Hong Kong Government would ultimately revise or remove the pegged rate.

In many events or in the newspapers recently, the general opinion of most businessmen in Hong Kong favours the continued pegged rate of HK$7.8/US$. The major underlying reasons are:

1. The continuation of the peg rate would maintain a stable political condition which is the most important factor in the continued prosperity of Hong Kong. This is also the main concern of the Sino-British Agreement in the future of Hong Kong.
2. The continuation of the peg rate would maintain a stable economic environment for the local business. Since the fourth quarter of 1983, most business in Hong Kong benefited from the stable U.S. Dollar exchange rate which eliminated most of the exchange risk of many business as most of the exports of Hong Kong are denominated in U.S. Dollar.
3. The Hong Kong exports benefited from the weakening of the U.S. Dollar. If the peg rate is removed or revised upwards, the competitive edge over other countries may be reduced or eliminated totally.
4. The depreciation of the Hong Kong Dollar would attract capital inflow for investment in securities, properties as such investment would become cheaper for funds originated from non-U.S. countries.
5. As the government reiterated several times that

the peg rate will remain unaltered, the revision or elimination of the peg rate will cause the people of Hong Kong to lose their confidence in the government and will also doubt on the future of Hong Kong.

On the other hand, some people considered that the manipulation of the interest rate to maintain the pegged U.S. Dollar exchange rate is not a healthy move and the Hong Kong Government should consider to amend or to revise the pegged rate. Their major arguments are:

1. The effective exchange rate index for the Hong Kong Dollar has already dropped to a very low level following the deteriorating of the U.S. Dollar in 1986. On 14th January 1987, the index has dropped to 63.17 which was still lower than the time when the pegged rate was implemented on 15th October 1983 which was 65.9 at that time. Under such circumstances, the Hong Kong Government should increase the interest rate to save the further weakening of the Hong Kong Dollar. On the contrary, due to the slumping of the U.S. Dollar, the Hong Kong Dollar interest rate was reduced to protect the pegged rate. This move violates the market situation and the Hong Kong Dollar would continue to weaken and further drop in the effective exchange rate is anticipated.
2. Due to the continued weakening of the Hong Kong Dollar and the free capital entry and exit policy of Hong Kong, foreign capital flows in and these

funds are invested in the security and property markets. The inflow of foreign capital into the security and property markets caused the booming of these two markets which encourages speculation which is not beneficial to the residents of Hong Kong.

3. The pegged rate system was established at the time when there was a political and confidence crisis. Now the crisis is over and this system should then be removed. Though there would be some fluctuations at the time when the system is removed, the exchange market should soon find an equilibrium price for Hong Kong Dollar through demand and supply operations.

Background

The history of the present linkage system between Hong Kong Dollar and U.S. Dollar has to be dated back to 1983. At the end of 1974, the Hong Kong Government announced the floatation of the Hong Kong Dollar. Since 1982, the Chinese and the British governments started to hold negotiations on the future of Hong Kong after the year 1997. This issue has been a hot topic among the residents of Hong Kong since the British Prime Minister, Mrs. Maragret Thatcher, visited China in September, 1982.

At the start of the discussion between the British and Chinese governments, the progress was not promising. The British Prime Minister asserted that the treaties whereby the Hong Kong Island and the Kowloon

Peninsula at the southern part of Boundary Street were ceded totally and the area to the north of Boundary Street was leased to Britain until the year 1997 were to be respected. However, China repeatedly claimed the possession of sovereignty over the whole of Hong Kong after the year 1997, and that the unequal treaties are not to be recognised.

Shortly after such uncompromising situation, a confidence crisis was provoked in Hong Kong. The exchange rates of the Hong Kong Dollar against most other major currencies had been on the downward trend since the third quarter of 1982. As at the year end 1981, the HK$/US$ exchange rate was HK$5.593/US$ while at the end of the year 1982, the exchange rate was HK$6.072/US$. The Hong Kong Dollar continued to drop in the year 1983. The U.S. Dollar exchange rate at the end of August, 1983 has raised to HK$7.437/US$.

When the fourth round of Sino-British talks on the future of Hong Kong adjourned in September, 1983 without conspicuous signs of progress, uncertainty of the future and wide-spread speculation caused the local currency to depreciate further to a point where HK$9.6 was required in exchange for a unit of the U.S. currency on 24th September, 1983. Banks were unwilling to exchange the local currency into foreign currencies for their customers or at a very large spread to cover their risk. Panic buying in supermarkets and the gold and platinum prices rose to a record.

Besides market intervention by the Hong Kong Government and The Hong Kong & Shanghai Banking Corporation in various occasions to rescue the Hong Kong Dollar, on 15th October 1983, the Hong Kong Government announced a stabilization scheme whereby the Hong Kong Dollar is pegged to the U.S. Dollar at the official rate of HK$7.8/US$. The mechanism of the control is that the two note-issuing banks, that is, The Hong Kong & Shanghai Banking Corporation and The Standard Chartered Bank, are now required to pay the Government's Exchange Fund for new Certificates of Indebtedness, which they are required to hold as backing for increases in their notes issues, in foreign exchange at a fixed rate of HK$7.8 to US$1. Similarly, when notes are withdrawn from circulation and the note-issuing banks surrender Certificates of Indebtedness, the Exchange Fund will pay them the equivalent foreign exchange at the same rate. In addition, where other banks in Hong Kong wished to obtain Hong Kong Dollar notes from the two notes-issuing banks, an equivalent amount of U.S. funds at the rate of HK$7.8/US$ has to be credited into the accounts of the note-issuing banks.

The market response to the announcement was favourable and the exchange rate of HK$/US$ fluctuated within a narrow range around this official rate in the past three years. The market exchange rate of HK$/US$ for the period November 1985 to October 1986 is described in Figure 1.5[3].

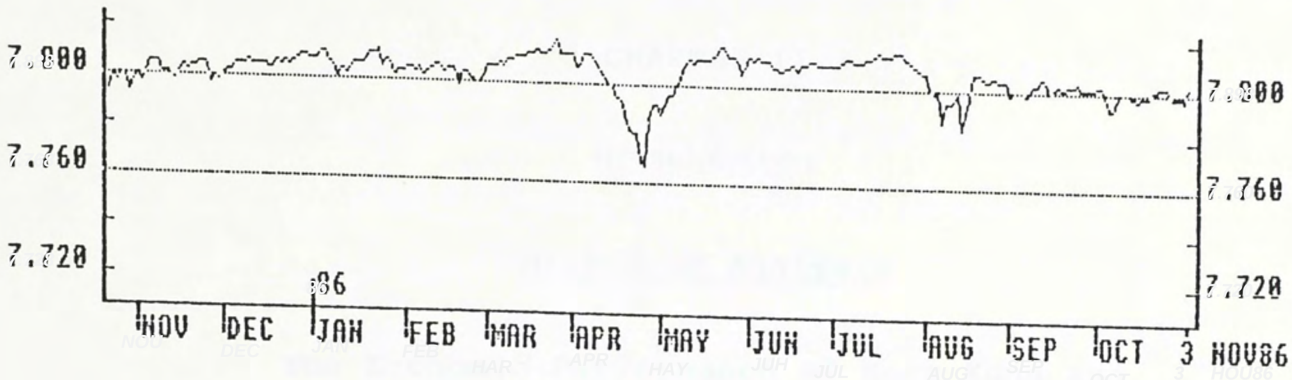

Figure 1.5 Exchange Rate of H.K. Dollar per U.S. Dollar

3 Reuter Monitor Graphics

CHAPTER II

METHODOLOGY

Method of Analysis

The Economic Performance of Hong Kong and The United States for the Period 1984-1986

In a survey conducted by Michael Jilling and William R. Folks, Jr., in 1975 on 107 multinational corporations to determine current corporate practices in forecasting exchange rates[1], it was found that the following economic indicators were reported to be the most important factor in determining/forecasting the exchange rates:

1. Rates of Inflation,
2. Balance of Payments,
3. Interest Rate Differentials, and
4. Money Supply Growth.

The trends of these four variables for Hong Kong and the United States are traced for the period 1985-1986. Quarterly data during this period are used and the description of the individual variables and its relationship with the exchange rate are given below

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[1] Michael Jilling and William R. Folks, Jr., 'A Survey of Corporate Exchange Rate Forecasting Practices', Working Paper No. 3, Center for International Business Studies, University of South Carolina, Columbia, 1977.

Rate of Inflation

The theory of purchasing power parity holds that if the spot exchange rate between two countries starts in equilibrium, any change in the differential rate of inflation between them tends to be offset over the long run by an equal but opposite change in the spot exchange rate[2].

Figure 2.1 shows a general case of purchasing power parity. The vertical axis shows the percentage appreciation of the foreign currency relative to the home currency, and the horizontal axis shows the percentage higher or lower rate of inflation in the foreign country relative to the home country. The diagonal parity line shows the equilibrium position between a change in the exchange rate and relative inflation rates.

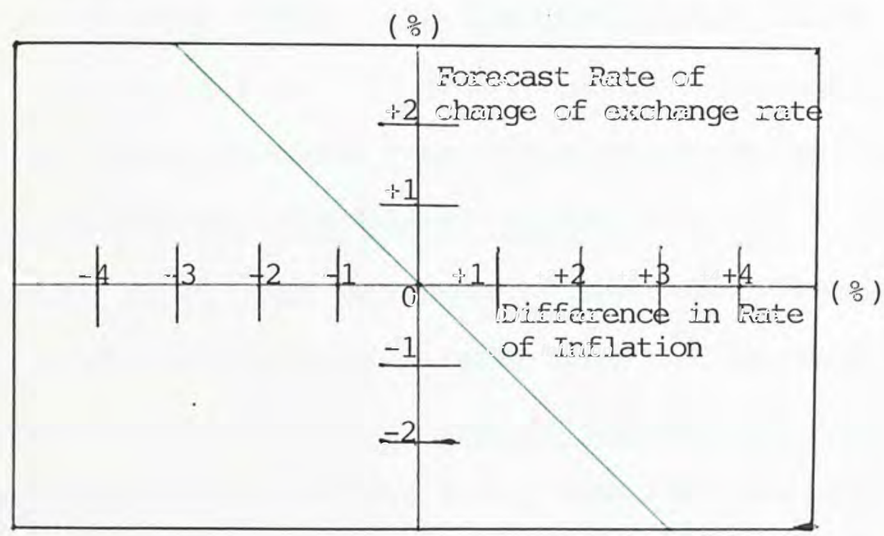

Figure 2.1 Purchasing Power Parity line

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2 David K. Eiteman and Arthur I. Stonehill, 'Multinational Business Finance', Addison-Wesley Publishing Company, 1983, pp.124-126.

A justification for purchasing power parity is that if a country experiences inflation rates higher than those of its main trading partners, its exports of goods and services will become less competitive with comparable products produced elsewhere. Imports from abroad will also become more price competitive with higher priced domestic products. Thus the country with relatively high inflation rates will develop a deficit in its balance of payments in goods and services. If not offset in the capital account, this deficit will lead to downward pressure on the country's spot exchange rate, because demand for foreign currency to settle imports of goods and services will be greater than other countries' demand for the country's currency for the same purpose.

In this study, the Consumer Price Index (B), which runs closely to CPI (A) was chosen to represent the price level in Hong Kong. The data was obtained from Hong Kong Monthly Digest of Statistics[3]. For the U.S. price level, the consumer price index for wage earners and clerical workers was used in the analysis which was obtained from Survey of Current Business[4]. For both Hong Kong and the U.S., the indices used were the averages of the last month of the quarter.

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3 Census and Statistics Department, Hong Kong Monthly Digest of Statistics, Hong Kong Government Printer, 1983 to 1986 issues.

4 Bureau of Economic Analysis, Survey of Current Business Washington, D.C., Department of Commerce, 1983 to 1986 issues.

Balance of Payments

If a country spends more abroad in combined purchases and investments than it earns or otherwise acquires from abroad over a sustained period of time, the probability of devaluation increases[5]. As foreigners are building up monetary claims on the country, the local government has to purchase foreign currencies in the foreign exchange market to settle these claims. This action would increase the demand for foreign currencies and thus would cause the domestic currency to depreciate. This phenomenon would be reversed when the country has balance of payment surplus, i.e. it earns more from abroad than it spends abroad. The demand for the domestic currency would increase as foreigners are purchasing the domestic currency to settle claims against them. The domestic currency will appreciate under such circumstances.

In this paper, the merchandise trade balance of Hong Kong and the United States and domestic exports to the U.S. were utilized in our analysis. The quarterly figures were obtained from Hong Kong Monthly Digest of Statistics and Survey of Current Business for Hong Kong and United States data respectively.

Interest Rate

The effect of interest rate on the exchange rate is mainly due to its effect on capital flow. Hong Kong

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5 David K. Eiteman and Arthur I. Stonehill, Multinational Business Finance, Addison-Wesley Publishing Company, 1983, pp.136-137.

is a free port for capital entry and exit. Higher domestic interest rates will make investment in Hong Kong more attractive. The inflow of capital into Hong Kong would increase the demand for Hong Kong Dollar and thus the appreciation of the local currency.

In this study, the 3-month time deposit rate offered by banks of Hong Kong and 3-month Treasury bill rate of the U.S. were chosen to represent the interest rate of the two places. The three-month period was chosen so that it will not be subjected to daily market fluctuations but short enough to reflect the general phenomenon. The bank deposit rates and Treasury Bill were chosen because they are free of risk factor. The data used was the daily averages of the last month of a quarter. The source of data of Hong Kong rates was from Hong Kong Monthly Digest of Statistics, and that of the U.S. rates was Survey of Current Business.

Money Supply

Monetarists believe that inflation occurs if a country's money grows faster than is warranted by real economic growth[6]. An increase in Hong Kong money supply will create an excess supply of money and will lead to more spending on foreign goods and services, hence raising the offer of Hong Kong currency in the foreign exchange

6 David K. Eiteman and Arther I. Stonehill, Multinational Business Finance, Addison-Wesley Publishing Company, 1983, p.138.

market[7]. As a consequence, the Hong Kong Dollar will depreciate in the foreign exchange market.

Money aggregate definitions M1, M2 and M3[8] for Hong Kong and the U.S. were reviewed. Money supply data are averages of the last month of a quarter. Data for Hong Kong and the United States were extracted from Hong Kong Monthly Digest of Statistics and Survey of Current Business respectively.

Intrinsic Value of the Hong Kong Dollar in 1986

In a research report The Prospects of Hong Kong Dollar versus the U.S. Dollar under the Linked System (Wong, May 1984), the author utilized two approaches to arrive at an estimated intrinsic value of the Hong Kong Dollar. Firstly, the purchasing power parity approach stresses that the exchange rate, as the relative price

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7 Wong Yick-Kam, The Prospects of the Hong Kong dollar versus the U.S. Dollar under the Link System, Three Year MBA Programme, The Chinese University of Hong Kong, May 1984.

8 The definitions of money supply in Hong Kong are:
M1 : Notes and coins with the public, plus customers' demand deposits with licensed banks.
M2 : M1 plus customers' savings and time deposits with licensed banks plus negotiable certificates of deposit issued by licensed banks and held outside the monetary sector.
M3 : M2 plus customers' deposits with licensed and registered deposit-taking companies plus negotiable certificates of deposit issued by deposit-taking companies held outside the monetary sector.

of two monies, is determined by the difference in the rate of inflation between the two countries. The second approach makes use of the general view of balance of payments of the exchange rate, which takes the capital account to be determined, while treating both imports and exports as function of the exchange rate. In this study, the same two approaches are utilized.

<u>Purchasing Power Parity Approach</u> (The Prospects of HK dollar V. US$ under the L.S. (Wong, May 1984

Wong utilized the regression analysis by using quarterly data from the first quarter of 1975 to the second quarter of 1982 to establish the following model:

$$e = 1.713 + \underset{(6.15)}{1.339PHK} - \underset{(4,86)}{1.137PUS}$$
$$\quad\;\;(5.43)$$

$R^2 = 0.816$ $\quad F(2.27) = 59.70$ $\quad$ S.E.R. = 0.034

where e is the HK$/US$ exchange rate in natural logarithm

PHK is the price level in Hong Kong, represented by the Consumer Price Index (B), in natural logarithm

PUS is the price level in the U.S., represented by the Consumer Price Index for Wage Earners and Clerical Workers, in natural logarithm

The data PHK was obtained from <u>Hong Kong Monthly Digest of Statistics</u> while the information on PUS was extracted from <u>Survey of Current Business</u>.

Balance of Payments Approach

Again, Wong also utilized regression analysis to develop the following model for the Balance of Payments Approach:

$$e = \underset{(54.13)}{4.311} + \underset{(3.86)}{0.161}TBHKUS + \underset{(5.72)}{0.035}(P+G) + \underset{(4.92)}{0.051}TUS$$

$R^2 = 0.833$ $F(3.26) = 43.35$ D.W. = 1.402 S.E.R. = 0.175

where e is the HK$/US$ exchange rate

TBHKUS is the merchandise trade balance between Hong Kong and the U.S.

P is the total private consumption expenditure in Hong Kong

G is the government consumption in Hong Kong

TUS is the visible trade balance of the U.S.

The variable TBHKUS represented net exports to the U.S.A. which is Hong Kong's biggest export market. This variable is used as a proxy for trade balance, which represented demand behavior of Hong Kong Dollar in foreign exchange market. Total private and government consumption expenditure represented the demand for foreign currencies of the supply of Hong Kong Dollars. Visible trade balance of the U.S. was added to catch the fluctuations in foreign exchange markets that had speculative effects on the exchange rate. The figures for the variables TBHKS, P and G were obtained from the Hong Kong Monthly Digest of Statistics while the TUS was obtained from Survey of Current Business.

Survey on Medium-sized Business

The second part of this research consisted of a survey on medium-sized business on their opinion and their preference whether to revise or remove the peg rate and their action to be taken if the rumours come true. This survey was conducted by distribution of questionnaires to 250 medium-sized business which was selected by convenient sampling of clients from five licensed banks in Hong Kong (copy of the questionnaire is attached in Appendix 1). The five licensed banks being a European bank, an American bank, a well-established local bank, an American owned local bank and a South East Asia capital local bank which were so chosen to represent clients from different sources. Hong Kong companies tend to protect the secrecy of their operations, so it is not a common practice to answer mailed questionnaires. Thus, convenient sampling from existing clients guaranteed a higher rate of response. Out of the total 250 questionnaries distributed, 52 companies responded. The response rate is 20% which is considered satisfactory for using mailed questionnaire in data collection. The following hypotheses are tested:

1. Most business enjoy a steady environment due to the pegged exchange system of Hong Kong in the past three years;
2. Exporters and materials importers tend to favour the weakening of the U.S. Dollar while consumer products importers would react oppositely;

3. Most businessmen would prefer a peg rate rather that a free floating rate system as they afraid that the event in 1983 may happen again;
4. Most people would prefer the peg rate to remain unchanged;
5. Most people would anticipate the Hong Kong Dollar to appreciate against the U.S. Dollar if the peg rate is to be removed or revised;
6. If the businessmen believed that there will be a change in the peg rate, exporters will sell forward the anticipated receipt of U.S. Dollar or other foreign currencies while importers would try to delay payment as possible.

The mean and standard deviation of the scores for Questions 5 to 12 were calculated individually and the Z-test was utilized to decide whether the sample agreed or disagreed with the statement involved. We would also note the major underlying reasons why they agree or disagree with Question 5, 6 and 9.

In addition, the Analysis of Variance Method was utilized to test whether there is different opinion due to the following aspects:-

1. Nature of Business
2. Size of Business
3. Major Trading Currency

Nature of Business

The nature of business was divided into five main categories:-

a. Import Trade where goods are imported for local sale without any further processing or manufacturing. This type of business would suffer from a weak Hong Kong Dollar as the price of imported goods would become more expensive. Import traders would be most adversely affected from a weak Hong Kong Dollar as the foreign exchange risk constituted a major percentage of the cost of goods sold.

b. Manufacuring/Local Sale where materials are imported for manufacturing and finished products are sold mainly in the local market. Again, this type of business would suffer from a weak Hong Kong Dollar as the price of materials imported would become more expensive while sales are on Hong Kong Dollar. However, the effect of the weakening of Hong Kong Dollar would be less serious when compared with import trade business as the material costs would constitute a smaller percentage of the cost of goods sold and other manufacturing expenses, such as labour cost, factory overhead, etc., are mainly denominated in local currency.

c. Import and Export Trade where goods are imported for re-export. These import and export traders normally earn a thin spread between import and export prices. These import and export traders are slightly benefited from the weakening of the Hong Kong Dollar because selling prices are higher than buying prices.

d. Manufacturing/Export where materials are imported or obtained locally (which are actually imported by importers) for manufacturing and processing. These type of business would be benefited from the weakening of the Hong Kong Dollar because the price of export products would become cheaper or an exchange gain would be generated.

e. Export Trade where goods are purchased from the local market for export to the overseas buyers without further processing. This type of business is most benefited from the weakening of the Hong Kong Dollar as all the goods are purchased in local currency but sold in foreign currencies.

Due to the fact that different categories of business would be affected differently by the weakening of the Hong Kong Dollar, it was hypothesized that they would have different opinion on Question 5 to Question 11 in the questionnaire.

Size of Business

It was assumed that large customers are more systematic in handling foreign exchange risk and have different views on Question 5 to Question 12. The size of business was determined by its sales turnover for the year 1986 which is differentiated into five categories:-

a. Below HK$1 million;

b. HK$1 million to HK$ 10 million;

c. HK$10 million to HK$50 million;

d. HK$50 million to HK$100 million;

e. Above HK$100 million.

Major Trading Currency

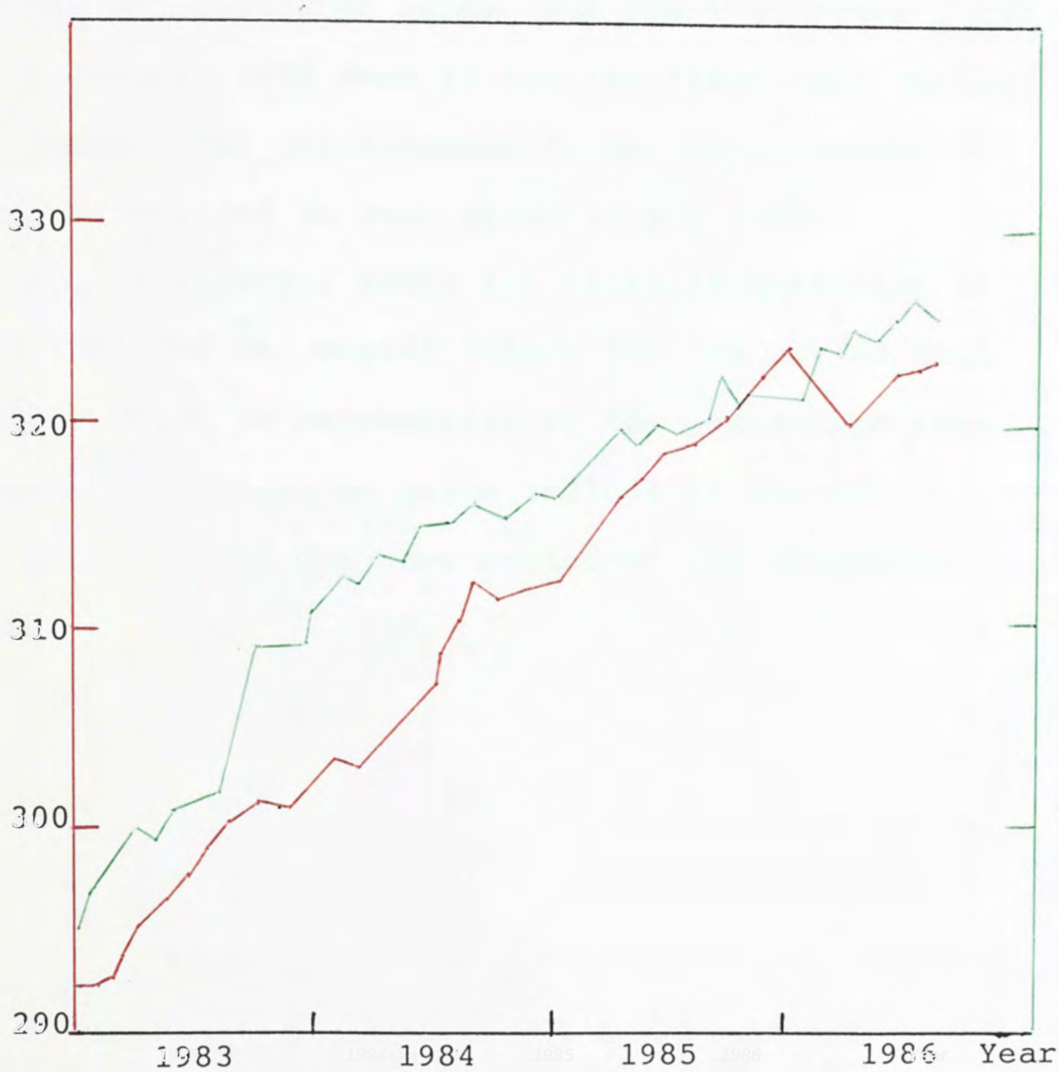
It was assumed that companies whose major trading currency is Hong Kong Dollar would be less rigorous in their opinion as they are less affected by the depreciation of the Hong Kong currency.

CHAPTER III

FINDINGS AND ANALYSIS

The Economic Performance of Hong Kong and The United States for the period 1984-1986

Rates of Inflation



—— Consumer Price Index (B) of Hong Kong

—— Consumer Price Index for Wage Earners and Clerical Workers of U.S.

Figure 3.1

Figure 3.1 shows the fluctuation of the price level of Hong Kong which is represented by the Consumer Price Index (B) and the price level of U.S. which is represented by the Consumer Price Index for Wage Earners and Clerical Workers for the period 1983-1986. As can be seen from the graph, though the two lines are fluctuating at different scale, the shape of the two lines repetite with each other. For the period 1983-1985, the Consumer Price Index line climbed upwards at a steeper slope than the U.S. Price Index until January 1986 when it was the first time during the period that the Consumer Price Index started to drop and started to rise again in May 1986.

Figure 3.2 shows the rates of inflation of Hong Kong and the United States for the period 1983 to 1986 which is represented by the percentage rate of growth of consumer price indices at the end of the quarter over the same period of the preceding year.

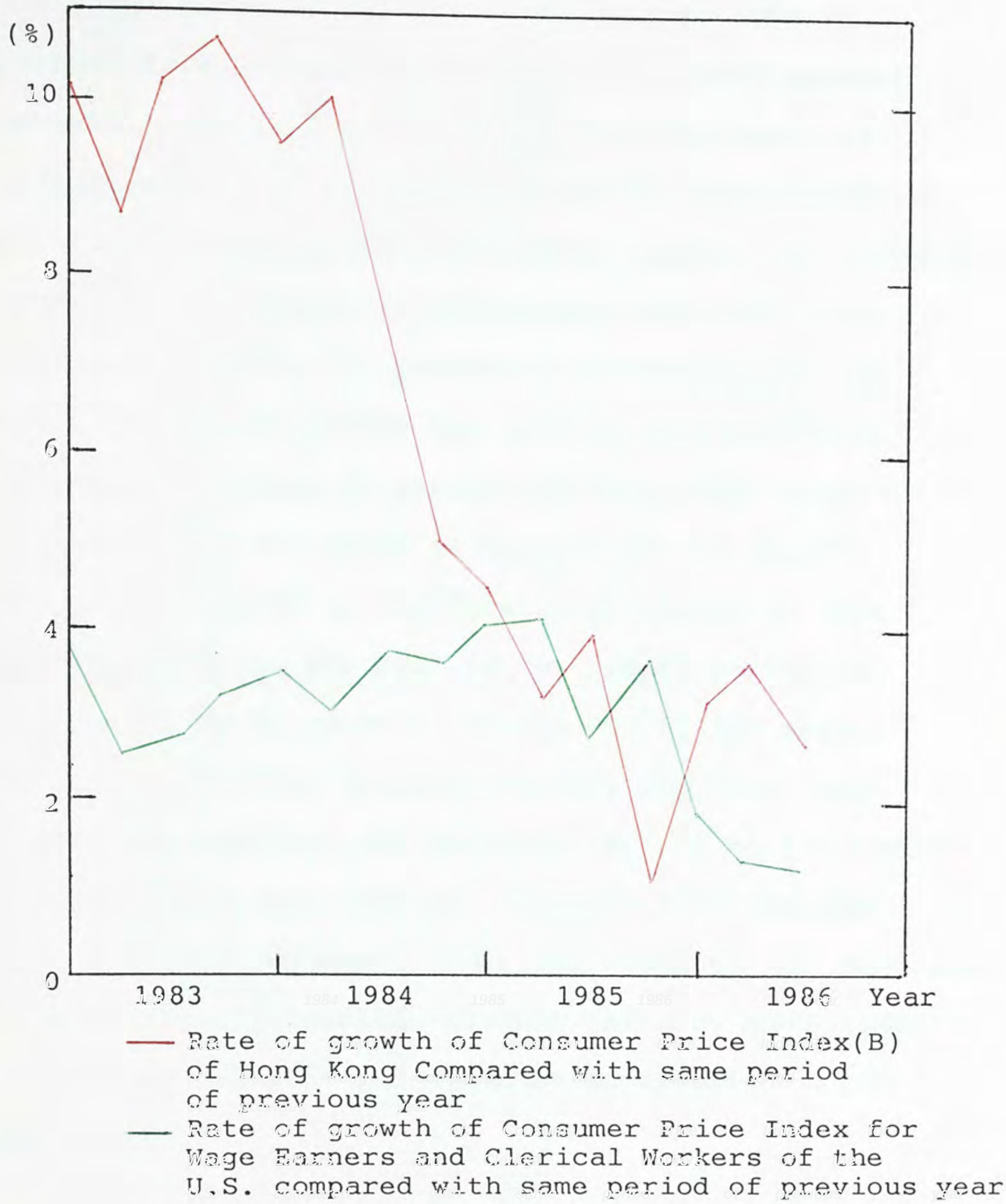


Figure 3.2 Rate of Inflation of H.K. and U.S.

As can be seen from the graph, the rates of inflations of Hong Kong fluctuate at about 10 percent in 1983 and the first half of 1984. The rates of inflation dropped rapidly since the second half of 1984 to below 4 percent in 1985 and 1986. In the

U.S., the rates of inflation were very steady at 2 percent to 4 percent and dropped to below 2 percent in 1986. The rate of inflation for Hong Kong was exceptionally low may be explained by several factors. Firstly, because of the successful attempts of industrial countries to reduce oil utilization and over-supply of crude oil from oil producing countries, the oil price during the period has reduced to a low level. Secondly, as about 43 percent of Hong Kong's imports of foodstuffs and about 44 percent of the imports of consumer goods in the first nine months of 1986 were from China, the fall in the import prices of Chinese goods in general, mainly due to the sharp devaluation of the Renminbi against the Hong Kong Dollar has exerted some dampening effect on the overall uptrend of consumer prices. Between 30th September 1984 and 30th September 1986, the Renminbi was devaluated on a number of occasions against the Hong Kong Dollar and the accumulated magnitude of devaluation was 30 percent.[1]

Balance of Payments

Started out with the trade deficit with its peak at about HK$4.6 billion at the second quarter of 1983 due to the confidence crisis on the Hong Kong Dollar, the trade performance of Hong Kong started to improve since the second quarter of 1983 (Figure

1 <u>Third Quarter Economic Report 1986</u>, November 1986, Hong Kong Government Printer, pp.56-57.

3.3). From the third quarter of 1984 till the third quarter of 1985, Hong Kong enjoyed positive trade balance with its peak at about HK$4.4 billion at the third quarter of 1985.

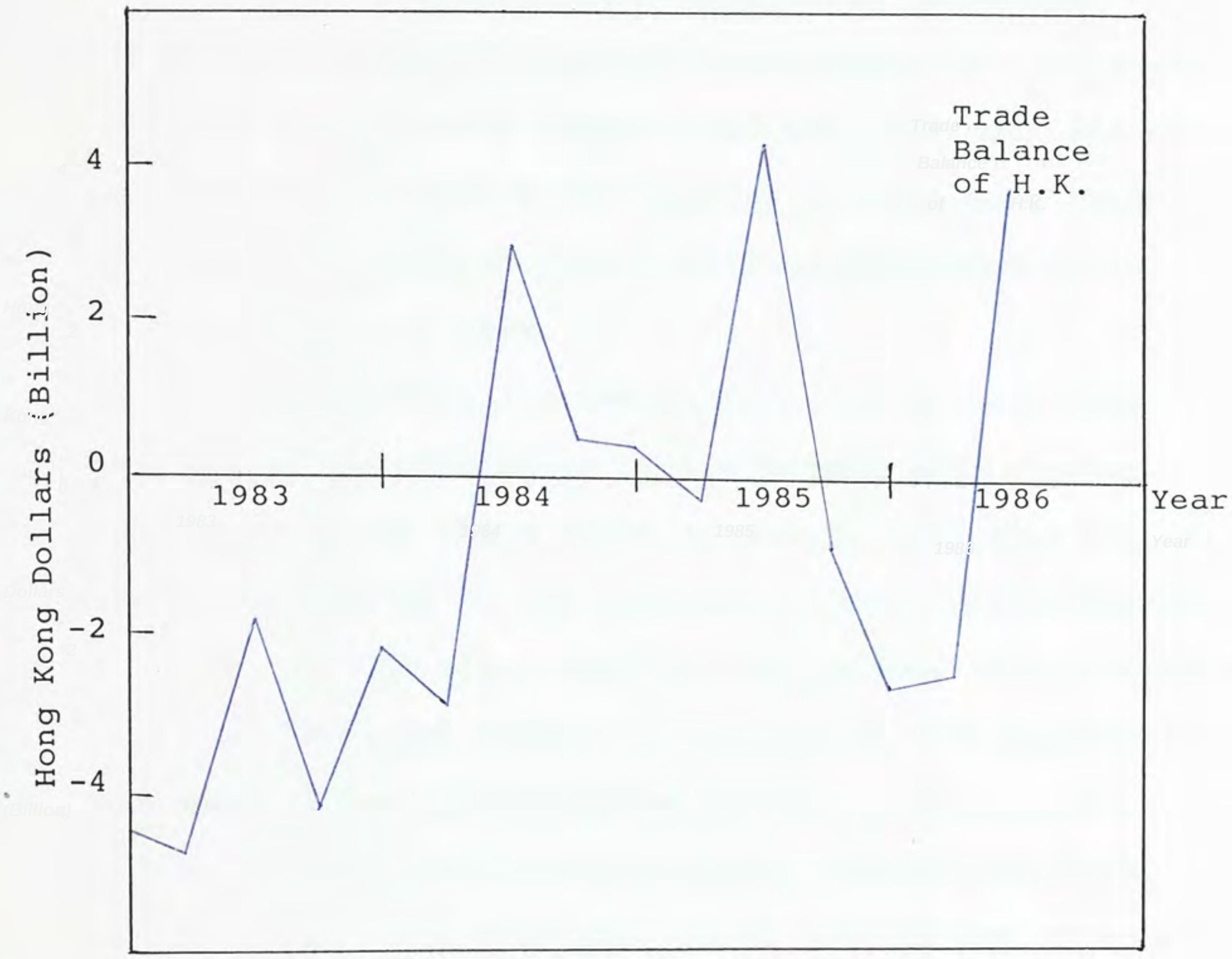


Figure 3.3 Trade Balance of Hong Kong

The improved trade performance of Hong Kong was partly attributed to the open door policy of the PRC which now became the second largest domestic export market and the largest re-export market of Hong Kong and the stabilized Hong Kong currency during the period.

However, due to the tightening of the exchange control of the PRC for purchasing of consumer goods since the third quarter of 1985 and the booming of domestic consumption, the trade balance was reverted to deficit in the fourth quarter of 1985. Partly attributed to the weakening of the Hong Kong Dollar in 1986 which boosted the domestic exports and the continued effort of the PRC to promote its exports through Hong Kong, a trading surplus of HK$4.2 billion was noted in the third quarter of 1986.

The overall trade performance of Hong Kong since the implementation of the pegged rate system was encouraging which would cause the Hong Kong Dollar to strengthen if it was allowed to float in the market.

On the other hand, as can be seen from Figure 3.4, besides some seasonal fluctuation, the merchandise balance of the United States was on an deteriorating trend. The United States suffered from merchandise trade deficit all over the period and the gap widened from year-to-year. In 1985, the U.S. government implemented a policy to depreciate its currency with the hope of improving its trade position. Since March 1985 till mid-1986, the Dollar had fallen in value by about 30 percent against an average of major currencies, and yet the trade gap kept on growing. It was estimated that the deficit would stand at US$168 million in 1986, a 13 percent increase over 1985's

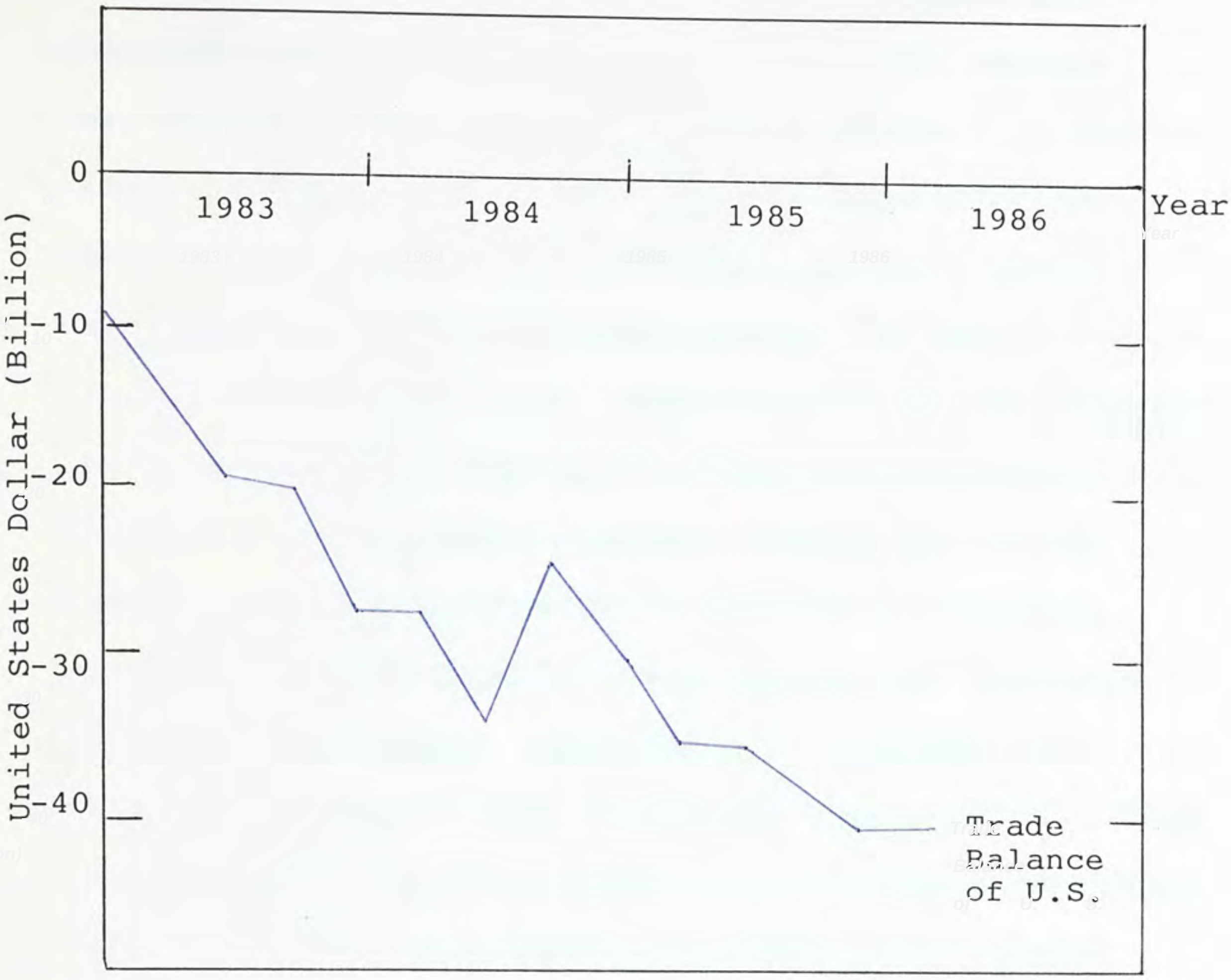


Figure 3.4 Trade Balance of U.S.

record level[2]. The trade deficit of Dollar, in fact, had risen against the currencies of some of America's most important commercial rivals. Canada, the United States' largest trading partner, did not feel any shrinking of its trade surplus with the United States. Taiwan's exports to the United States rose 18 percent, while imports from South Korea increased by 27 percent

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2 A Baffling Trade Imbalance, Time, August 11, 1986, p.30.

during the first four months of 1986[3]. There are several reasons leading to such unexpected results of the U.S. trade balsnce. Firstly, while it's true that the Dollar has dropped by over 30 percent against the top ten industrial currencies, it only showed a decline of about 6 percent against the United States' top 25 trading partners. Specifically, it has decreased by less than 4 percent against the Taiwan yuan and actually risen nearly 4 percent against the South Korean won from March 1985 to mid-1986. Secondly, the deficit continues to swell because the economies of Japan and Europe, where the U.S. Dollar's drop has been sharpest, were stagnating which created little new demand for foreign goods no matter how cheap they are. For the first quarter of 1986, Japan's gross national product fell 0.5 percent while that of West Germany was reduced by 1.5 percent from the previous three months[4]. Debt-ridden, less-developed countries, meanwhile, are restricting all but the most necessary imports, and oil producers have far less to spend. Thirdly, U.S. farm products, which once covered other weak spots in the trade picture, no longer do so. Old grain customers like China and India now grow more of their own, and the depreciated Dollar has

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3 An Incurable Trade Gap?, Newsweek, July 14,, 1986, p.40.

4 A Baffling Trade Imbalance, Time, Aug. 11, 1986, p.31.

not helped preserve traditional American farm markets elsewhere. The currencies of Argentina and Brazil have kept pace with the Dollar, keeping their exports competitive with U.S. farm goods. Finally, the unexpectedly high level of imports is another reason that the trade deficit has not shrunk. A sharp fall in the dollar normally implies a comparable increase in the price of foreign goods sold in the U.S. Foreign manufacturers usually raise their prices because the money converted into their home currencies. However, rather than lose sales in the United States, most foreign exporters are choosing to reduce their profits and hold the prices. As a result, in the first quarter of 1986, Americans paid only 1.2 percent more for imported goods than they did a year earlier. For example, the average price of Japanese automobiles has increased by no more than 14 percent though the Japanese Yen has risen by about 40 percent[5].

As reflected from Figure 3.5, the trade balance of Hong Kong with the U.S. continued to be favourable. Though there were seasonal fluctuations over time, it was generally on an improving trend.

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5 An Incurable Trade Gap?, Newsweek, July 14, 1986, pp.40-41.

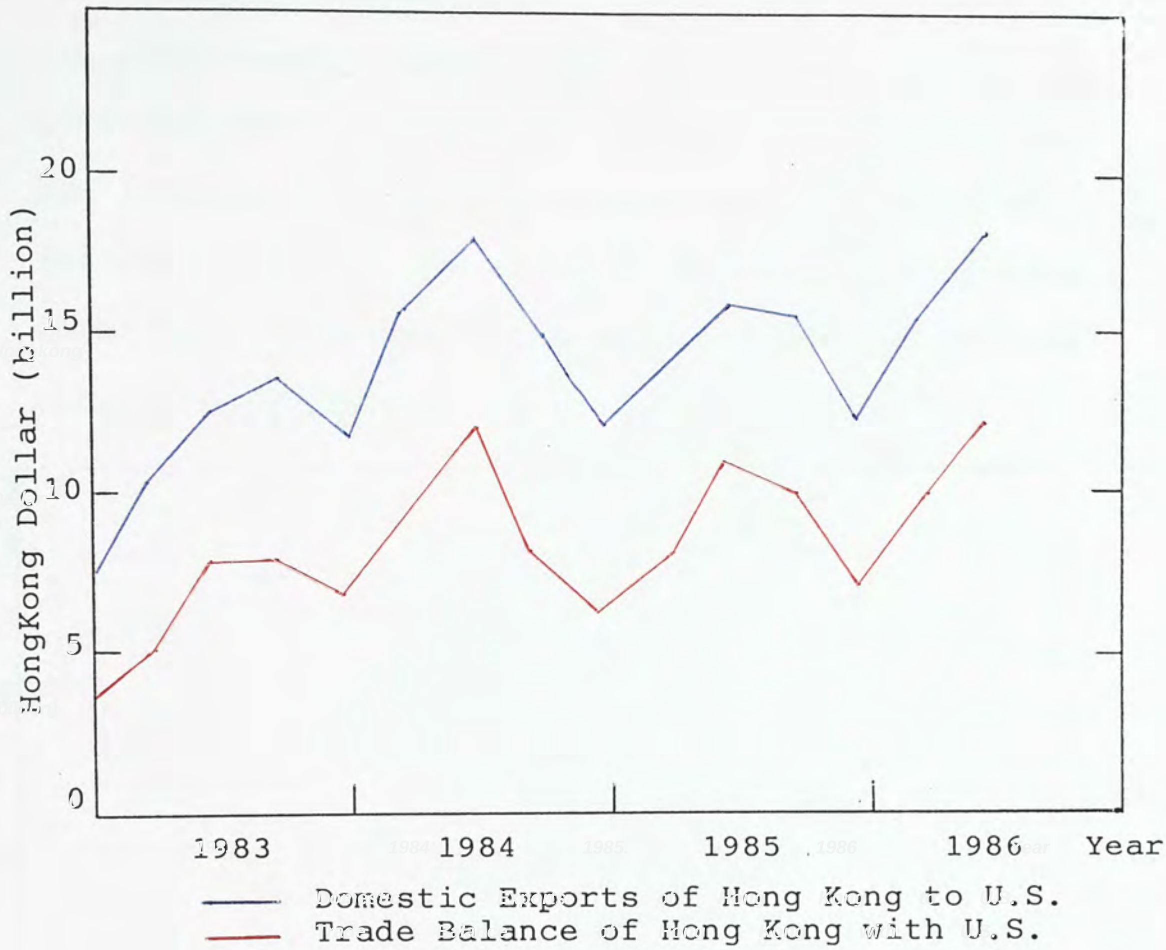

Figure 3.5

Interest Rates

As can be seen in Figure 3.6, except in 1983 when there was a confidence crisis, the general pattern of the changes in the interest rate of the 3-month deposit rate of the Hong Kong Dollar was quite similar to that of the 3-month Treasury bill rate of the U.S. Except in 1983 when the 3-month deposit rate of the Hong Kong Dollar is exceptionally high due to the confidence crisis of the Hong Kong Dollar, the interest rate of the 3-month Treasury bill rate of the U. S. was consistently higher than that of Hong Kong. In 1985 and 1986, the interest rate of Hong Kong Dollar was lowered to a very low level mainly because of inflow of capital and action taken by the Hong Kong Government to maintain the exchange rate of HK$/US$ under the pegged rate system.

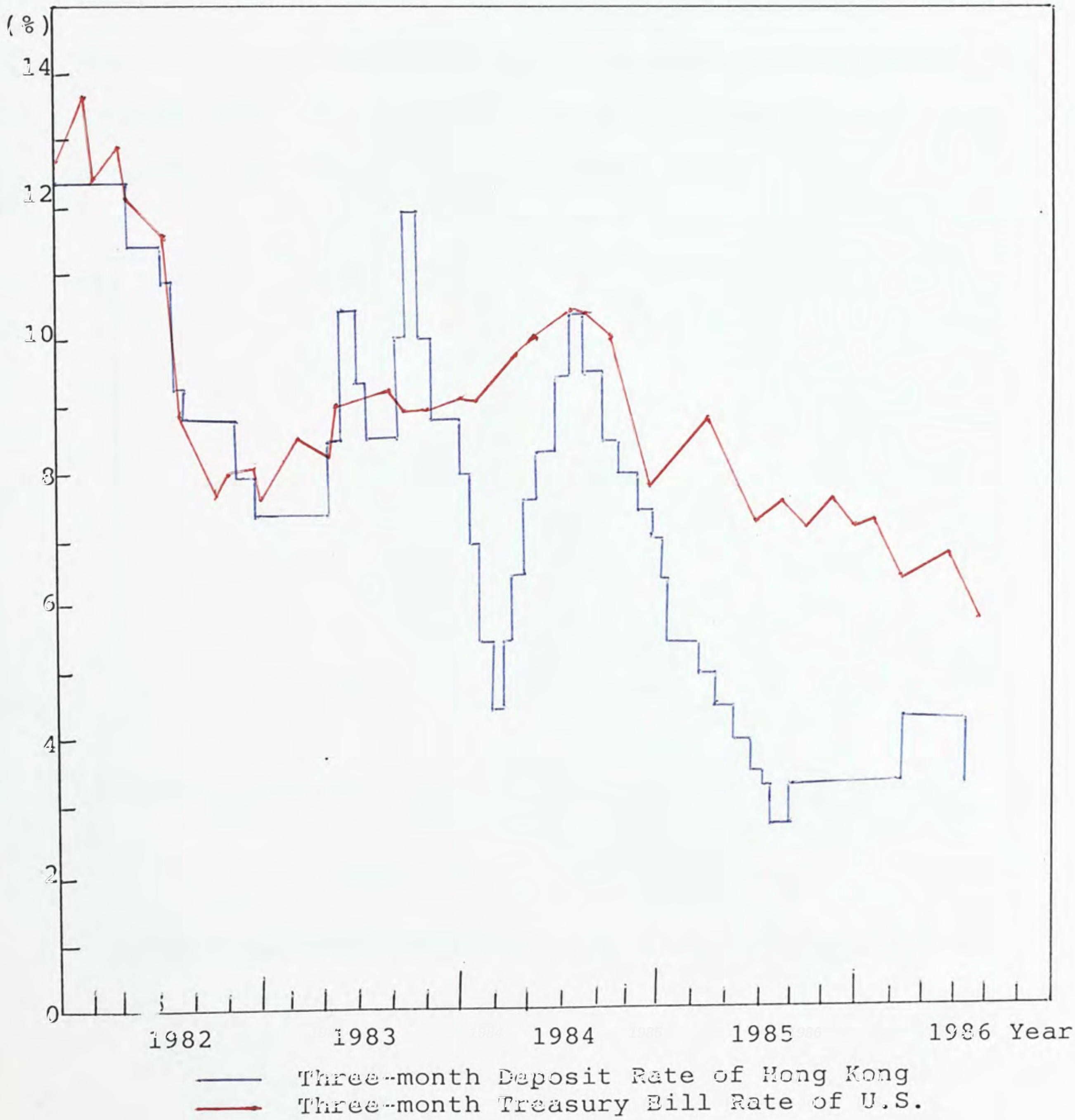

Figure 3.6

Money Supply Growth

The growth of money supply definitions M1, M2 and M3 of Hong Kong and the U.S. for the period 1983-1986 are shown in Figures 3.7, 3.8 and 3.9 respectively. As shown from the figures, the money supply growth of Hong Kong fluctuated greatly during the period while that of the U.S. were more stable. After period of credit contraction in 1983 due to depression in the property market and the confidence crisis, the money supply grew rather rapidly which has a dampening effect on the exchange rate.

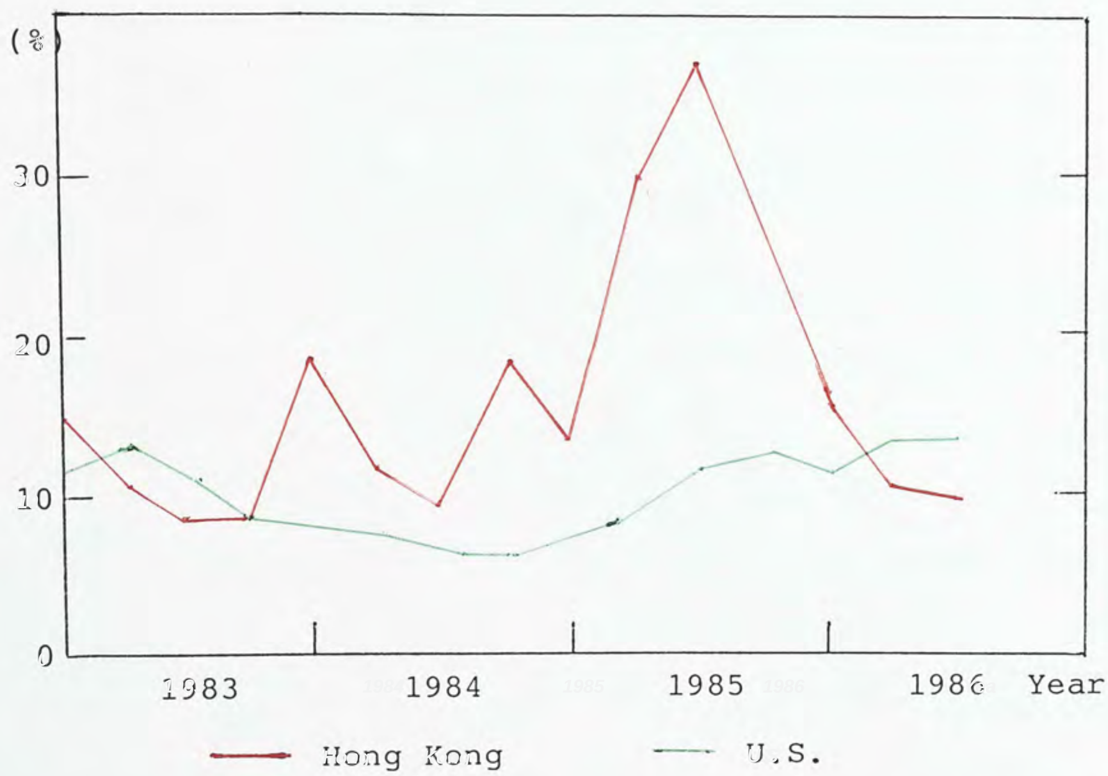

Figure 3.7 Money Supply Growth (M1) of H.K. and U.S.

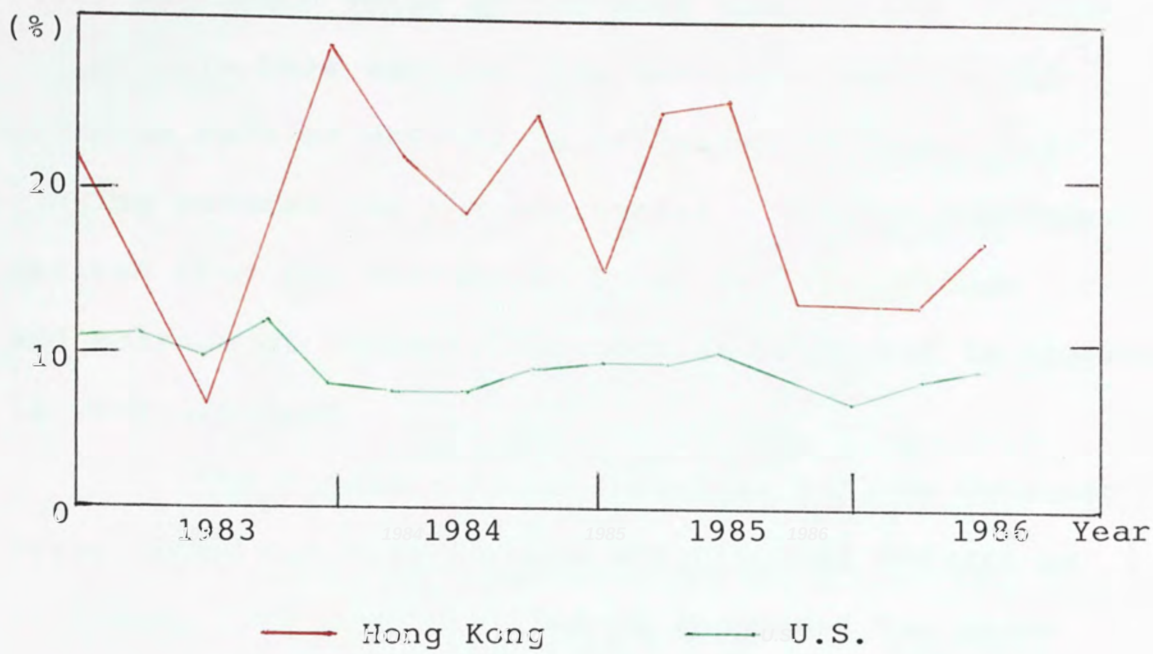

Figure 3.8 Money Supply Growth (M2) of H.K. and U.S.

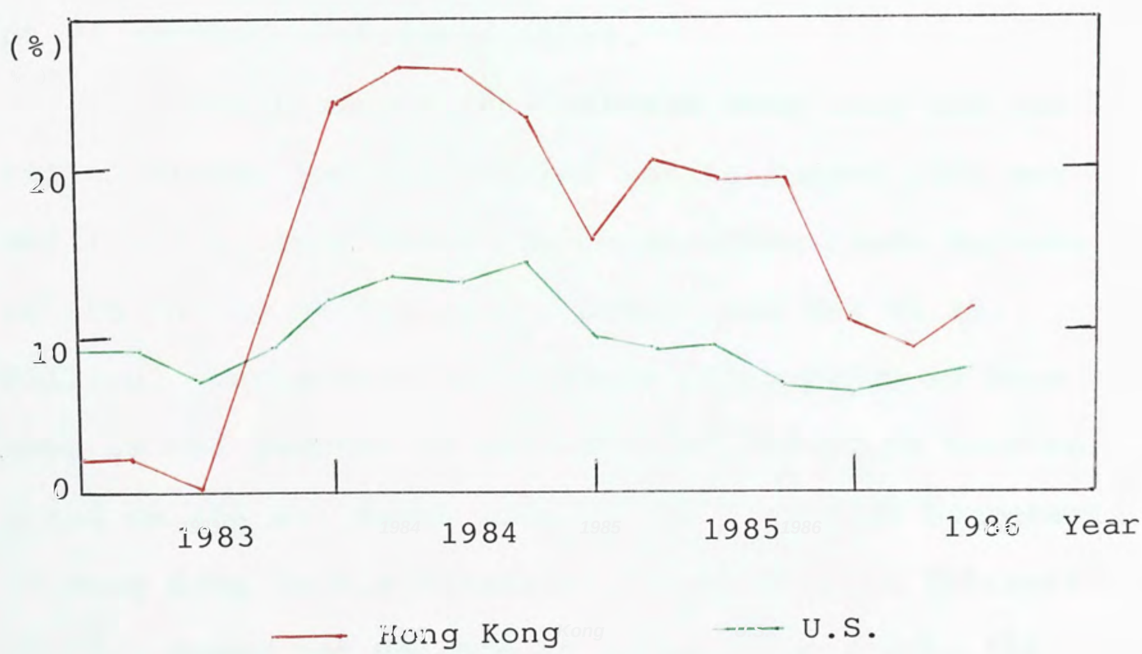

Figure 3.9 Money Supply Growth (M3) of H.K. and U.S.

The Intrinsic Value of the Hong Kong Dollar in 1986

In this section, the intrinsic equilibrium exchange rate of HK$/US$ is estimated if there is no linking between the two currencies. The two equations derived from the Purchasing Power Parity Approach and Balance of Payments Approach as mentioned in Chapter II were utilized.

The Consumer Price Index (B) and the Consumer Price Index for Wage Earners and Clerical Workers as at August 1986 were utilized to represent the price level of Hong Kong and the United States respectively. Using the model of Purchasing Power Parity Approach, the US$/US$ exchange rate at the end of August 1986 is estimated at:

$$7.2786 \pm 0.0666 = 7.212 \text{ to } 7.3452$$

at 95 percent confidence level.

The trade balance between Hong Kong and the United States for the quarter ending August 1986 was HK$11.853 billion while the merchandise trade deficit of the United States in the period was US$ 46.191 billion. Government and private consumption of Hong Kong is the quarter is estimated at HK$ 47.98 billion based on the estimates made by the Financial Secretary of Hong Kong in his financial budget on 25th February 1987[6]. Using the Balance of Payments Approach, the HK$/US$ exchange rate at the end of August 1986 is estimated at:

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6 Financial Daily, 26th February 1987 issue, in Chinese.

5.5429 ± 0.343 = 5.1999 to 5.8859

at 95 percent confidence level.

The above competition indicates that the intrinsic equilibrum value of the exchange rate of HK$/US$ by the end of August 1986 ranges from 5.1999 to 7.3452 which are significantly lower than the pegged rate of HK$7.8/US$. The computed exchange rate from the Purchasing Power Parity Approach is higher than that of the Balance of Payment Model mainly because of the increasing rate of inflation in the year 1986 due to higher prices of imported goods resulted from the depreciation of the Hong Kong Dollar against most other major currencies under the linked exchange system.

Survey of Medium Sized Business

The results of the survey are summarized as below:-

Characteristics of Sample Companies

Nature of Business	Frequency	Percentage
Import & Export Trade	15	28.8
Export Trade	2	3.8
Import Trade	3	5.8
Manufacturing/Export	20	34.5
Manufacturing/Local Sale	9	17.3
Others	3	5.8
	52	100.0

Number of Workers Employed	Frequency	Percentage
Under 10	10	19.2
10 - 29	8	15.5
30 - 99	14	26.9
100 - 300	10	19.2
Over 300	10	19.2
	52	100.0

Major Trading Currency	Frequency	Percentage
Hong Kong Dollar	14	27.5
United States Dollar	34	66.7
Japanese Yen	0	0.0
Deutsche Mark	3	5.8
Others	0	0.0
	51	100.0

Sales Turnover for the year 1986	Frequency	Percentage
Below HK$1 million	0	0.0
HK$1 million - HK$10 million	14	27.5
HK$10 million - HK$50 million	19	37.3
HK$50 million - HK$100 million	7	13.7
Above HK$100 million	11	21.5
	51	100.0

As can be seen from the statistics available, 20 out of 52 of the sample companies were engaged in Manufacturing/Export business and Import & Export Trade being the second most popular business. As regards to the size of the business in the sample, over 65 percent of the companies employed more than 30 workers while over 70 percent of the companies had sales turnover above HK$10 million in the year 1986. As expected, United States Dollar was the most popular trading currency (66.7 percent) and Hong Kong Dollar came second (27.5 percent). The sample represented the major characteristics of medium-sized local business in Hong Kong.

Opinion of Sample Companies

The weighted-average (mean) of the opinion of the companies who responded on different statements are represented as below:-

Statements

Statement	Most Agree					Most Disagree
1. The business/economy of Hong Kong is benefited from the pegged HK$/US$ exchange rate in the past three years (Question 5)	1	2	3	4	5	6
2. The recent weakening of the U.S. Dollar in the international exchange market benefits the economy of Hong Kong (Question 6)	1	2	3	4	5	6
3. The recent weakening of the U.S. Dollar is beneficial to your business (Question 7)	1	2	3	4	5	6
4. The present peg rate HK$7.8/US$ does not reflect the present value of the Hong Kong Dollar (Question 8)	1	2	3	4	5	6
5. The government will revise or remove the peg rate in the near future (Question 9)	1	2	3	4	5	6
6. The Hong Kong Dollar will appreciate towards the U.S. Dollar if the peg rate is to be amended (Question 10)	1	2	3	4	5	6

Statements	Most Agree 1	2	3	4	5	Most Disagree 6
7. You will welcome the amendment of the peg rate (Question 11)				X		
8. If the peg rate system is removed, there will be another crisis for the Hong Kong Dollar as what had happened in September 1983 (Question 12)			X			

49 out of the 52 companies agreed that the business/economy of Hong Kong is benefited from the pegged HK$/US$ exchange rate in the past three years. The major underlying reason being:

(A) The pegged HK$/US$ exchange rate provides a stable exchange rate for business in Hong Kong as most of the imports and exports of Hong Kong are in U.S. Dollar (29 or 59.2%).

(B) As most manufacturers/trading companies in Hong Kong are small to medium size which do not possess the expertise on foreign exchange, the pegged HK$/US$ exchange rate eliminated the concern for fluctuation in the exchange rates of the U.S. Dollar and can be treated as the home currency (7 or 14.3%).

(C) The pegged HK$/US$ exchange rate provides good confidence in the Hong Kong Dollar (4 or 8.2%).

(D) Others (1 or 2.0%).

There were only three companies disagreed that the business/economy of Hong Kong is benefited from the pegged HK$/US$ exchange rate in the past years as they considered that the Hong Kong Dollar did not reflect the economic performance of Hong Kong after the pegged rate system was implemented.

Again, 78.8 percent of the sample or 41 out of the 52 companies agreed that the recent weakening of the U.S. Dollar in the international exchange market benefited the economy of Hong Kong. The major underlying reason being:

(A) The Hong Kong Dollar follows the depreciation of the U.S. Dollar under the pegged rate system helps to boost the exports of Hong Kong as Hong Kong products become cheaper, especially in the European and Japanese market (21 or 51.20%).

(B) The weak Hong Kong Dollar attracts foreign capital to invest in Hong Kong (2 or 4.9%).

(C) The weak Hong Kong Dollar is a very effective weapon in competing with other Asian countries in the export, such as Taiwan, South Korea, etc. (10 or 24.4%).

There were eleven companies disagreed that the recent weakening of the U.S. Dollar in the international exchange market benefited the economy of Hong Kong.

Seven companies considered that imports of material became more expensive which would increase the material costs of Hong Kong products. The other four companies considered that imports of consomer products would became more expensive and a high inflation rate may be resulted and the weak Hong Kong currency encouraged the Hong Kong people to invest in foreign currencies which may further depreciate the value of Hong Kong Dollar.

The opinion on the statement ' The recent weakening of the U.S Dollar is beneficial to your business ' is more dispersed. 33 out of the 52 companies agreed with the statement while others did not. This situation may be explained by the fact that due to the general prosperous industries as a whole, material and labour costs inflated substantially. Quota prices also raised to record levels which hindered the profitability of some companies.

44 out of the 52 companies considered that the present peg rate did not reflect the present value of the Hong Kong Dollar. However, 38 out of the 52 companies considered that the government will not revise or remove the peg rate in the near future. The major underlying reason being:

(A) The Hong Kong Government will and has demonstrated its willingness to keep its promise to maintain the peg rate (7 or 18.4%).

(B) Neither one of the three parties, the Hong Kong, British and PRC governments, is willing to risk the prosperity of Hong Kong by creating the uncertainty (7 or 18.4%).

(C) Continued stability is more important than any other consideration (14 or 36.8%).

(D) The U.S. Dollar will strengthen in the future (1 or 2.6%).

Out of the 14 companies who considered that the government will revise or remove the peg rate in the near future, the major underlying reason being:

(A) Continued pressure is received from the U.S. to appreciate the Hong Kong Dollar (2 or 14.3%).

(B) All the three parties, the Hong Kong , British and PRC governments agree that the present peg rate does not reflect the actual value of Hong Kong Dollar and it would be beneficial to let the exchange rate better reflect the intrinsic value of Hong Kong Dollar (3 or 21.4%).

(C) The continued weakening of the Hong Kong Dollar will ultimately ruin the economy of Hong Kong (5 or 35.7%).

(D) The Hong Kong government has no other alternative to maintain the present peg rate (3 or 21.4%).

(E) Others (1 or 7.1%).

42 out of the 52 companies agreed that the Hong Kong Dollar will appreciate towards the U.S. Dollar if the peg rate is to be amended. 36 out of the 52 companies will not welcome the amendment of the peg rate.

Z-test on Question 5 to Quetion 12

The following hypothesis is tested:

H_0: The general opinion of the population on the statement concerned follows a normal distribution, i.e. mean = 3.5

H_1: The general opinion of the population agrees or disagrees with the statement concerned, i.e. mean $\neq$ 3.5

The results are summarized as follows:

Question	Mean A	Standard Deviation B	Computed Z-value (A-3.5)/B	Decision[7]
5	1.94	1.027	-1.52	Accept H_0
6	2.44	1.499	-0.71	Accept H_0
7	3.25	1.616	-0.15	Accept H_0
8	2.21	1.182	-1.09	Accept H_0
9	4.58	1.432	-0.75	Accept H_0
10	2.40	1.319	-0.83	Accept H_0
11	4.21	1.656	0.43	Accept H_0
12	2.90	1.690	-0.36	Accept H_0

[7] $z_{(0.95)}$ = 1.96, if computed z value > 1.96, accept H_0

As can be seen from the above, the null hypothesis could not be rejected at 95 percent level of significance for all statements involved though there was a general inclination in the statements. A possible reason for this phenomenon may be due to central tendency, i.e. people tends to choose the answers at the middle (3 or 4) rather than the extremes (1 or 6). Another reason would be the fact that some people who have different opinion, though they only represented a small portion, have very significant effect on the standard deviation which would then affect the computed value.

Analysis of Variance

The variance of means differentiated by nature of business, size of business and major trading currency for Question 5 to Question 12 is analysed.

Nature of Business

The following hypothesis for each question is tested:

H_0: $u_A = u_B = u_C = u_D = u_E = u_F$

H_1: not all u are equal

where u_A = mean score of companies engaged in import and export trade

u_B = mean score of companies engaged in export trade

u_C = mean score of companies engaged in import trade

u_D = mean score of companies engaged in manufacturing/export

u_E = mean score of companies engaged in manufacturing/local sale

u_F = mean score of companies engaged in other business

Size of Business

The following hypothesis for each question is tested:

$H_0 : u_B = u_C = u_D = u_E$

H_1 : not all u are equal

where u_B = mean score of companies with sales turnover of HK$1 million - HK$10 million in 1986

u_C = mean score of companies with sales turnover of HK$10 million - HK$50 million in 1986

u_D = mean score of companies with sales turnover of HK$50 million - HK$100 million in 1986

u_E = mean score of companies with sales turnover of over HK$100 million in 1986

Major Trading Currency

The following hypothesis for each question is tested:

$H_0 : u_A = u_B = u_D$

H_1 : not all u are equal

where u_A = mean score of companies which are mainly trading on Hong Kong Dollar

u_B = mean score of companies which are mainly trading on United States Dollar

u_D = mean score of companies which are mainly trading on Deutsche Mark

Disposition of Total Variation

If the null hypothesis that the mean are equal is true, then both the variation among the sample means and the variation within the groups reflect chance errors of the sampling process. The first of these types of variation is referred to as between-treatment variation and the second type is referred to as within-treatment variation. Between-treatment is variation of the sample means around the grand mean. On the other hand, within-treatment variation is variation of the individual observations within each column from their respective means. Under the null hypothesis that the population means are equal, the between-treatment variation and the within-treatment variation would be expected not to differ significantly from one another after adjustment for degrees of freedom, since they both reflect the same type of chance sampling errors.

The Results

The results are summarized as below:

Variable	Question	Between-Treatment: Sum of Square	Between-Treatment: Degree of Freedom	Between-Treatment: Mean Square	Within-Treatment: Sum of Squares	Within-Treatment: Degree of Freedom	Within-Treatment: Mean Square	F-Value	Decision[a]
Nature of Business	5	3.96	5	0.79	50.87	46	1.11	0.71	Accept H_0
	6	16.81	5	3.36	100.02	46	2.17	1.55	Accept H_0
	7	12.00	5	2.40	123.75	46	2.69	0.89	Accept H_0
	8	5.01	5	1.00	67.66	46	1.47	0.68	Accept H_0
	9	5.83	5	1.17	100.86	46	2.19	0.53	Accept H_0
	10	4.85	5	0.97	85.67	46	1.86	0.52	Accept H_0
	11	11.14	5	2.23	131.53	46	2.86	0.78	Accept H_0
	12	16.32	5	3.26	132.20	46	2.87	1.14	Accept H_0
Size of Business	5	0.48	3	0.16	53.44	47	1.14	0.14	Accept H_0
	6	6.83	3	2.29	107.52	47	2.29	1.00	Accept H_0
	7	4.97	3	1.66	123.07	47	2.62	0.63	Accept H_0
	8	10.83	3	3.61	60.35	47	1.28	2.82	Reject H_0
	9	2.37	3	0.79	103.98	47	2.21	0.36	Accept H_0
	10	0.19	3	0.06	88.32	47	1.88	0.03	Accept H_0
	11	3.74	3	1.25	128.42	47	2.73	0.46	Accept H_0
	12	8.44	3	2.81	136.38	47	2.90	0.97	Accept H

Variable	Question	Between-Treatment Sum of Squares	Between-Treatment Degree of Freedom	Between-Treatment Mean Square	Within-Treatment Sum of Squares	Within-Treatment Degree of Freedom	Within-Treatment Mean Square	F-Value	Decision[8]
Major Trading Currency	5	2.87	2	1.44	51.05	48	1.06	1.36	Accept H_0
	6	11.55	2	5.78	103.15	48	2.15	2.69	Accept H_0
	7	3.71	2	1.59	131.98	48	2.75	0.58	Accept H_0
	8	4.57	2	2.28	67.47	48	1.41	1.62	Accept H_0
	9	8.04	2	4.02	96.12	48	2.00	2.01	Accept H_0
	10	6.23	2	3.12	83.93	48	1.75	1.78	Accept H_0
	11	7.47	2	3.74	133.71	48	2.79	1.34	Accept H_0
	12	0.05	2	0.03	148.46	48	3.09	0.02	Accept H_0

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[8] $F_{0.05}(5,46)$ = 2.42, if computed F-value 2.42, accept H_0;
$F_{0.05}(3,47)$ = 2.80, if computed F-value 2.80, accept H_0;
$F_{0.05}(2.48)$ = 3.19, if computed F-value 3.19, accept H_0.

The results indicated that the opinion did not differ significantly due to different nature of business, size of business or major trading currency. This may be due to the fact that there were dispersed opinion among different groups.

Anticipated exchange rate of HK$/US$ if the Hong Kong Dollar is to be floated in the market

Anticipated HK$/US$ Exchange Rate	Frequency	Percentage
Below 6.5	6	12.8
6.6 - 7.0	11	23.4
7.1 - 7.5	22	46.8
7.6 - 8.0	6	12.8
Above 8.0	2	4.2
	47	100.0

Most companies (46.8%) considered that the exchange rate of HK$/US$ should fall between 7.1 and 7.5 if the Hong Kong Dollar is to be floated in the market. 39 out of the 47 companies considered that the exchange rate should be below HK$7.5/US$, which is significantly below the pegged rate of HK$7.8/US$.

Action to be taken if it is anticipated that the peg rate will be removed or revised

Action to be taken	Frequency	Percentage
(A) Sell foreign currency in the forward market	13	26
(B) Sell Hong Kong Dollar in the forward market	5	10
(C) Sell all foreign currencies on hand	12	24
(D) Sell all Hong Kong Dollar on hand	4	8
(E) Do nothing	16	32
	50	100

Summary of the Results

Though the results of the survey on medium sized business cannot produce a generalization on their opinion when using the Z-test and the analysis of variance due to the wide-spread opinion, 49 out of the 52 companies who responded agree that the business/ economy of Hong Kong is benefited from the pegged HK$/US$ exchange rate in the past three years. 41 companies consider the recent weakening of the U.S. Dolalr in the international exchange market benefits the economy of Hong Kong and the major underlying reason being that the Hong Kong Dollar follows the depreciation of the U.S. Dollar under the pegged rate system helps to boost the exports of Hong Kong as Hong Kong products became cheaper, especially in the European and Japanese market. The major underlying reason for disagreeing that the weakened U.S. Dollar benefits the economy of Hong Kong being that imports of materials become more expensive which would increase the material costs of Hong Kong products and a higher inflation rate may be resulted due to raising prices of imports. 33 companies agreed that the weakening of the U.S. Dollar is beneficial to their business and 44 companies considered that the present peg rate does not reflect the present value of Hong Kong Dollar. 38 or 73.2 percent of the sample considered that the government will not revise or remove the peg rate in the near future as they considered that continued stability is more important than any other consideration. 42 companies out of the sample agreed that the Hong Kong Dollar will appreciate towards the U.S. Dollar if the pegged rate is to be amended and 69.3 percent of the sample did not welcome the amendment of the peg rate. 67.4 percent of the sample is afraid that if the peg rate is removed, there will be another crisis for the Hong Kong Dollar. If the Hong Kong Dollar is to be floated in the market, most companies considered that the HK$/US$ exchange rate should fall between HK$6.6/US$ to HK$7.5/US$. the action to be taken by the companies varies greatly while most companies would do nothing.

CHAPTER IV

CONCUSION

As can be seen from the findings in Chapter III, the interest rate of 3-month Treasury Bill of the U.S. is consistently higher than the 3-month deposit rate of Hong Kong in the years 1985 and 1986. According to the International Fisher Effect, The spot exchange rate should change in an equal but opposite direction to the difference in interest rate between two countries in a floating exchange rate system as the investors in the U.S. Treasury Bill must be rewarded with a higher interest rate to offset the expected rate of depreciation of the United States Dollar[1]. On the other hand, except in the second and fourth quarter of 1985, the rate of inflation of the United States is higher than that of Hong Kong. Under the Theory of Purchasing Power Parity, the higher inflation rate of the United States would cause its currency to depreciate against the Hong Kong Dollar under the free floating system. In terms of Balance of Payments, the trade balance of Hong Kong recovered to surplus

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[1] David K. Eiteman and Arthur I. Stonehill, Multinationl Business Finance, Addison-Wesley Publishing Company, 1983, pp.130-131.

position in 1984 to 1986 whereas the trade balance of the United States continued to deteriorate with the estimated record trade deficit of US$ 168 billion in 1986. Trade balance of Hong Kong with the United States since 1984 increased considerably though there were seasonal fluctuations and increasing restrictions imposed by the United States. All these factors would lead to the believe that the U.S. Dollar should be depreciated against the Hong Kong Dollar if the latter is allowed to float in the foreign exchange market.

On the other hand, the money supply growth of Hong Kong fluctuated greatly when compared to the United States. In addition, the growth rates of money supply of Hong Kong in general were higher than that of the United States which has a dampening effect on the Hong Kong Dollar if the money supply growth rate is higher than the economic growth. However, as three out of four economic variables imply a tendency for depreciation of the U.S. Dollar, and according to the Purchasing Power Parity Model and Balance of Payments Model in estimating the intrinsic value of the Hong Kong Dollar, the value of the Hong Kong Dollar should be at a higher level than the official pegged rate.

Surprisingly, the results of the survey cannot prove the hypotheses as mentioned in Chapter II. However, there is still a general opinion that most business enjoy a steady environment due to the pegged exchange system and most business are benefited from the weakened U.S. Dollar. Most companies consider the peg rate does not reflect the value of the Hong Kong Dollar but they consider that the Hong Kong Government will not revise or remove the peg rate in the future as continued stability is most important for Hong Kong. Lastly, most companies would expect the exchange rate of HK$/US$ should lie in the range of HK$6.6/US$ to HK$7.5/US$ which is quite close to the intrinsic value of the Hong Kong Dollar derived from the Purchasing Power Parity Model and Balance Payments Model.

As the Hong Kong Government has demonstrated its determination to maintain the pegged rate, it would be logical to believe that the pegged rate will not be removed or revised in the near future. However, if the U.S. Dollar continues to depreciate further in the foreign exchange market, Hong Kong will ultimately suffer from high inflation rate and other defects may appear. Under such circumstances, the Hong Kong Government should reconsider to revise or remove the pegged rate.

Appendix 1

Please choose ONE SINGLe best answer in each question

1. Nature of Business:

   (A) Import & Export Trade (B) Export Trade

   (C) Import Trade (D) Manufacturing/Export

   (E) Manufacturing/Local Sale

   (F) Others (Pls specify) ______________________

2. Number of workers Employed:

   (A) under 10 (B) 10-29

   (C) 30-99 (D) 100-300

   (E) Over 300

3. Major Trading Currency:

   (A) Hong Kong Dollar (B) United States Dollar

   (C) Japanese Yen (D) Deutsche Mark

   (E) Others

4. Sales Turnover for the year 1986:

   (A) Below HK$1 million

   (B) HK$1 million - HK$10 million

   (C) HK$10 million - HK$50 million

   (D) HK$50 million - HK$100 million

   (E) Above HK$100 million

For Question 5 to 12, please mark on the scale 1 to 6 whether you most agree (1) or most disagree (6) with the statement in the question.

	Most Agree 1	2	3	4	5	Most Disagree 6
5. The business/economy of Hong Kong is benefited from the pegged HK$/US$ exchange rate in the past three years.	1	2	3	4	5	6

If you AGREE with the statement in Question 5, the major underlying reason being:

(A) The pegged HK$/US$ exchange rate provides a stable exchange rate for business in Hong Kong as most of the imports and exports of Hong Kong are in U.S. Dollar.

(B) As most manufacturers/trading companies in Hong Kong are small to medium size which do not possess the expertise on foreign exchange, the pegged HK$/US$ exchange rate eliminated the concern for fluctuation in the exchange rates of the U.S. Dollar and can be treated as the home currency.

(C) The pegged HK$/US$ exchange rate provides good confidence in the Hong Kong Dollar.

(D) Others (Pls specify) ______________________

If you DISAGREE with the statement in Question 5, the major underlying reason being:

(A) It violates the free competition philisophy of the Hong Kong economy.

(B) The Hong Kong Dollar does not reflect the economic performance of Hong Kong after the pegged rate system is implemented.

(C) The Hong Kong Dollar continues to fluctuate against most other currencies together with the U.S. Dollar. The stabilization effect is not very efficient under the pegged rate system.

(D) Others (Pls specify) ______________________

	Most Agree					Most Disagree
6. The recent weakening of the US Dollar in the international exchange market benefits the economy of Hong Kong.	1	2	3	4	5	6

If you AGREE with the statement in Question 6, the major underlying reason being:

(A) The Hong Kong Dollar follows the depreciation of the U.S. Dollar under the pegged rate system helps to boost the exports of Hong Kong as Hong Kong products become cheaper, especially in the European and Japanese market.

(B) The weak Hong Kong Dollar attracts foreign capital to invest in Hong Kong.

(C) The weak Hong Kong Dollar is a very effective weapon in competing with other Asian countries in the export market, such as Taiwan, South Korea, etc..

If you DISAGREE with the statement in Question 6, the major underlying reason being:

(A) Imports of materials becomes more expensive which would increase the material costs of Hong Kong products.

(B) Imports of consumer products becomes more expensive and a high inflation rate may be resulted.

(C) The weak Hong Kong currency encourages the Hong Kong people to invest in foreign currencies which may further depreciate the value of Hong Kong Dollar.

(D) The aggregate wealth of the people of Hong Kong declines as the currency depreciates.

(E) Others (Pls specify) ______________________________

	Most Agree					Most Disagree
7. The recent weakening of the US Dollar is beneficial to your business.	1	2	3	4	5	6
8. The present peg rate HK$7.8/ US$ does not reflect the present value of the HK$.	1	2	3	4	5	6
9. The government will revise or remove the peg rate in the near future.	1	2	3	4	5	6

If your AGREE with the statement in Question 9, the major underlying reason being:

(A) Continued pressure is received from the U.S.A. to appreciate the Hong Kong Dollar,

(B) All the three parties, the Hong Kong, British and PRC governments agree that the present peg rate does not reflect the actual value of Hong Kong dollar and it would be beneficial to let the exchange rate better reflect the intrinsic value of Hong Kong Dollar.

(C) The continued weakening of the Hong Kong Dollar will ultimate ruin the H.K. economy.

(D) The H.K. government has no other alternative to maintain the present peg rate.

(E) Others (Pls specify) ______________________________

If you DISAGREE with the statement in Question 9, the major underlying reason being:

(A) The H.K. government will and has demonstrated its willingness to keep its promise to maintain the peg rate.

(B) Neither one of the three parties, the Hong Kong, British and PRC governments, is willing to risk the prosperity of Hong Kong by creating the uncertainty.

(C) Continued stability is more important than any other consideration.

(D) The U.S. Dollar will strengthen in the future.

(E) Others (Pls specify) ______________________________

	Most Agree					Most Disagree
10. The HK$ will appreciate towards the US$ if the peg rate is to be amended.	1	2	3	4	5	6
11. You will welcome the amendment of the peg rate.	1	2	3	4	5	6
12. If the peg rate system is removed, there will be another crisis for the HK$ as what had happened in Sept 83.	1	2	3	4	5	6

13. What do you consider the exchange rate of HK$/US$ should be if the HK$ is to be floated in the market

(A) below 6.5 (B) 6.6 - 7.0 (C) 7.1 - 7.5

(D) 7.6 - 8.0 (E) above 8.0

14. If you anticipate that the peg rate will be removed or revised in the near future, what action you would take:

(A) Sell foreign currency in the forward market

(B) Sell Hong Kong Dollar in the forward market

(C) Sell all foreign currencies on hand

(D) Sell all Hong Kong Dollar on hand

(E) Do nothing.

Appendix 2

Rate of Inflation of H.K. and U.S.

		H.K.	U.S.
1983	Q.1	10.40%	3.72%
	Q.2	8.62%	2.45%
	Q.3	10.23%	2.73%
	Q.4	10.67%	3.25%
1984	Q.1	9.56%	3.51%
	Q.2	9.91%	3.03%
	Q.3	7.42%	3.76%
	Q.4	5.09%	3.55%
1985	Q.1	4.40%	3.96%
	Q.2	3.16%	4.08%
	Q.3	3.90%	2.66%
	Q.4	1.06%	3.59%
1986	Q.1	2.89%	1.93%
	Q.2	3.50%	1.35%
	Q.3	2.59%	1.19%

Appendix 3

Money Supply Growth of H.K. and U.S.

		H.K.			U.S.		
		M1	M2	M3	M1	M2	M3
1983	Q.1	15.48%	21.56%	2.50%	11.18%	10.09%	9.31%
	Q.2	11.24%	14.86%	2.06%	12.83%	10.91%	8.96%
	Q.3	8.76%	6.25%	0.13%	11.64%	9.53%	7.54%
	Q.4	8.40%	14.77%	12.57%	9.04%	11.56%	9.35%
1984	Q.1	18.62%	28.49%	24.83%	7.97%	7.99%	13.18%
	Q.2	11.99%	21.69%	26.50%	7.34%	7.56%	13.82%
	Q.3	9.50%	17.94%	26.89%	6.26%	7.58%	13.77%
	Q.4	17.94%	24.30%	23.95%	6.07%	8.49%	14.81%
1985	Q.1	12.97%	13.61%	15.70%	6.95%	8.92%	10.45%
	Q.2	29.15%	24.51%	20.90%	8.54%	8.91%	9.40%
	Q.3	36.91%	25.18%	19.80%	11.40%	9.49%	9.42%
	Q.4	25.35%	12.80%	19.99%	12.29%	8.05%	7.58%
1986	Q.1	15.83%	12.21%	11.23%	11.61%	6.77%	6.71%
	Q.2	10.97%	12.24%	9.16%	12.99%	7.92%	7.48%
	Q.3	9.53%	16.55%	12.12%	13.37%	8.48%	8.22%

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