
A Survey of Singapore's Monetary History

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A SURVEY OF SINGAPORE'S MONETARY HISTORY

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EXECUTIVE SUMMARY

1 This paper provides an overview of the evolution of Singapore's currency and monetary policy arrangements, against the backdrop of the history of the international monetary system.

2 The discussion begins with an account of the Gold Standard era from 1870 to 1914, a period of unprecedented growth in the world economy. Under the arrangements of the Gold Standard, countries fixed their currencies' value in terms of gold. The paper proceeds to describe the conditions, which facilitated the workings of the system such as the close cooperation which prevailed among the major central banks at that time.

3 The next major event in international financial markets was the Bretton Woods agreement for a system of fixed exchange rates. This system worked well for about 25 years, between 1945 and 1971. However, strains on the system arose from the late 1960s onwards, as governments found it increasingly difficult to commit to the fixed exchange rate system in view of competing domestic policy imperatives.

4 The essential feature of the current international financial system which emerged after the final breakdown of Bretton Woods in 1973 is that it was unplanned or uncoordinated, a 'no system', as some have termed it. This no system has produced large swings in the exchange rates of the major industrialised countries, which in turn, has caused volatility in the exchange rates of the developing countries. This is because developing countries have either been pegging their exchange rate to a reserve currency, like the US Dollar, or managing it against a basket of major currencies.

5 Our survey then picks up on the historical development of Singapore's monetary and currency arrangements. Singapore was founded by the British in 1819, who developed the island as a regional port for the trading activities of the East India Company. As merchandise trade

transactions were settled through Singapore, the mediums of exchange used in the world markets at that point in time would also be used for transactions locally. Singapore's currency and monetary arrangements in the early years, were therefore in a sense, an endogenous outcome of our important position as regional trading centre. For example, during the period 1819 to 1903, silver coins from Mexico, Spain and Peru, were used in Singapore and the other countries in the region. Singapore switched to the Gold Standard when the major trading nations in the east adopted the system in the final years of the nineteenth century. These included Russia, Japan, India, and Siam (present Thailand) around the 1890s.

6 With the beginning of industrialisation from about the 1950s, Singapore anchored itself to the Sterling pound. This served as a means to achieve stability and confidence in our currency. Great Britain continued to be a major trading partner of Singapore and an important source of capital flows. The peg to the pound was therefore backed by the underlying trade patterns.

7 Through the 1960s and early 1970s, Singapore was subjected to the increasing fragility of the Bretton Woods System. With the breakdown of the system of fixed parities in 1973, Singapore was confronted with the need to build-up its exchange rate management infrastructure, as it no longer had an anchor currency to 'import' stability and confidence. During this crucial period of transition, the Board of Commissioners of Currency played a crucial role in supporting Singapore's exchange rate system. By backing the issue of the domestic currency with foreign reserves, the government signalled to financial markets its commitment to maintaining a strong convertible currency.

8 The exchange rate centred monetary policy evolved gradually through the early 1980s. The main objective of monetary policy was to achieve stability in prices, and confidence in the domestic currency; these have always been paramount to Singapore's success as a trading centre. The choice of the exchange rate as the instrument of monetary policy

emerged as an endogenous outcome to the objective of price stability, and the structure of the Singapore economy. The latter implied that the exchange rate could have a powerful influence on inflation outcomes.

9 The system has proven its ability to deliver on the objective of maintaining price stability in the two decades it has been in operation. Its resilience was reaffirmed during the Asian crisis, when the flexibility of the system was a key part of the MAS response to the unfolding turmoil across regional financial markets.

10 The paper concludes by drawing some lessons and implications from the historical review. For example, we highlight the fact that the exchange rate system of a country is often an endogenous outcome of domestic and external factors. However, while an appropriate exchange rate regime facilitates the achievement of macroeconomic stability, it does not safeguard against the country's vulnerability to speculative pressures. The Asian crisis has underscored the importance of backing up the exchange rate system with sound, consistent and credible macroeconomic policies.

11 The importance of this point has been highlighted by MAS' own experiences over its 25-year history, as it sought to ensure the macroeconomic stability of the economy, and safeguard the soundness and integrity of the financial system. The MAS adopted a number of key guiding principles over the years, which included: (i) adopting a medium to long term perspective when making policies; (ii) ensuring an ethos of fiscal prudence within the government, which helped the MAS in its task of preserving the value of the currency; and (iii) recognising that confidence is the key to modern financial systems. Although central banks would need to adapt their strategies to changing circumstances and conditions, the fundamentals of prudence, stability and confidence will continue to be the relevant guiding philosophy in currency and monetary policy management in the future.

(I) BACKGROUND ON THE INTERNATIONAL FINANCIAL SYSTEM

1 GOLD STANDARD, 1870s–1914

1.1 The emergence of the Gold Standard in the 1870s and its successful operation till the start of World War I were largely due to specific historical conditions. Before the advent of gold, many countries were on bimetallic standards permitting the simultaneous minting and circulation of both gold and silver coins. Such monetary standards were not easy to sustain; fluctuations in gold and silver supplies made it difficult for countries to keep their mint ratios (gold price for silver set by mint authorities) in line with market prices.

1.2 England's adoption of a de facto gold standard provides an early example of the difficulty in maintaining a bimetallic standard. At the end of the seventeenth century, silver was undervalued at the mint and was being rapidly exported to Asia where it could fetch a higher price. To encourage the circulation of silver coins, English officials decided to lower the mint price of gold progressively. In 1717, the last such adjustment was undertaken by Sir Isaac Newton, master of the mint. However, the price adjustment was too small and silver continued disappearing from circulation. Newton's "mistake" coincided with the gold rush in Brazil, and put England on a path toward adopting a gold monetary standard. By 1774, England's shift to gold was widely acknowledged when silver's legal tender status for transactions in excess of £25 was revoked.

1.3 The Industrial Revolution firmly established Great Britain as the world's leading economic and financial power. This provided an incentive for other European countries to adopt the Gold Standard as well. Sweden, a Silver Standard country, established a parallel gold-based system to clear transactions with Britain and Portugal, which traded heavily with Britain, adopted the Gold Standard in 1854. However, an international switch to gold was still slow to come by. The turning point came in 1871 when

Germany abolished its Silver Standard and issued a new currency, the mark, based on gold. With two of the world's leading industrial powers (Britain and Germany) on the Gold Standard, neighbouring European countries were quick to abandon Bimetallic Standards, and the Gold Standard soon went international, spreading to countries in Asia (around late 1890s) and the Americas (around 1900).

1.4 Under the Gold Standard, countries fixed their currency's value in terms of gold. The use of gold in domestic and international transactions was essentially unrestricted, and international gold flows equilibrated national money markets. For example, if Britain ran a trade deficit with France, French merchants would find themselves holding an excess of British currency, which they would exchange - via their bankers in London - with the Bank of England for gold. This gold could then be presented to the Bank of France and converted into francs for their use. Consequently, the gold flows would cause an increase in money supply in France and a decrease in Britain. The corresponding inflationary/deflationary impacts in the respective countries would correct the trade imbalances.

1.5 This system worked remarkably well from the 1870s till about 1914. Economic historians have proposed a number of reasons for the system's success, and these are summarised under two categories: credibility and co-operation.

1.6 The importance that governments attached to the maintenance of balance of payments equilibrium made the Gold Standard credible. Before the development of theories by Keynes and others after World War I, there was no well-articulated theory of how fiscal and monetary instruments could be used to influence the level of economic activity. Governments followed a balanced-budget rule and were rarely confronted by the conflict between policies needed to maintain internal and external balance. Furthermore, during the period of the Gold Standard, universal suffrage was still limited. Labour parties were few and rarely exercised significant influence. Those who might have objected to the macro policy restraint were

in no position to influence government thinking. The lack of domestic political pressures on policymaking gave markets confidence in government's commitment to the fixed exchange rate agreement, and led investors to react to currency fluctuations in stabilising ways.

1.7 Ultimately, however, the credibility of the pre-war Gold Standard rested on international co-operation. When stabilising speculation and domestic intervention proved incapable of accommodating a disturbance, the system was stabilised through co-operation among governments and central banks. Minor problems were solved by a tacit arrangement between central banks that involved "following a leader" (usually the Bank of England). The leader usually adjusted its discount rates depending on global credit conditions while other banks co-ordinated their interest rate responses accordingly. During major crises, countries made their reserves available to those in need. Central banks and governments discounted bills on behalf of the weak-currency country or lent gold to its central bank. Such international co-operative management further enhanced the fixed exchange rate's credibility, especially during crisis periods.

2 INTER-WAR INSTABILITY, 1914 – 1945

2.1 Convertibility under the Gold Standard was unofficially suspended with the outbreak of World War I. Citizens were discouraged from attempting to convert currency into gold by appeals to patriotism and difficulties in obtaining shipping insurance and space inhibited international gold flows. At the war's end, only the US (where inflation had been relatively moderate and gold reserves abundant) maintained convertibility at the pre-war rate. Most countries struggling with the burden of reconstruction and inflation, had to institute a series of tax increases and spending cuts in an effort to re-establish gold convertibility. By 1929, an international Gold Standard was back in place. However, unlike its predecessor, the Gold Standard in the inter-war period was plagued by financial crises. In fact, the insistence to continue with a system of fixed parities after the October stock market crash of 1929 was claimed to have perpetuated the Great Depression (Box Item 1).

2.2 The Gold Standard inter-war years did not enjoy the supporting conditions of its predecessor. Investors could no longer be certain of governments' commitment to external balance as policymakers were now distracted by other commitments. The spread of unionism during the war led to the politicising of the wage bargaining process and to demands that government direct policy at reducing the unemployment rate. Fiscal policy also became influenced by interest groups, and governments came to rely on the printing presses to finance deficits.

2.3 The system's credibility was further challenged by changes in the way countries managed their reserves. Instead of holding gold reserves equal in value to the size of the national currency issue, most countries covered only a fraction of their liabilities with gold or major currencies, such as US Dollars or Pounds. Whenever gold was pulled out of the system, it resulted in a credit contraction that was several times larger than the amount of reserves withdrawn. This heightened the multiplier effect on the world money supply and made the system less resistant to shocks.

2.4 With the erosion of credibility, international co-operation became even more important than before the war. Yet the requisite level of co-operation was not forthcoming. Domestic political constraints, major political disputes and competing conceptual frameworks prevented policymakers from reaching a common understanding of their problem, much less from agreeing on a solution. Co-operation was made even more difficult as surplus countries, especially the US and France, began to stockpile the world's gold, thereby exacerbating the asymmetry between deficit and surplus countries under the system of fixed parities.

Box Item 1
The Inter-War Gold Standard and the Great Depression

Academics vary widely in their views on what caused the Great Depression. One view is that the Depression was caused by a world-wide monetary contraction, originating in the US and transmitted abroad by a combination of policy errors and technical flaws in the inter-war Gold Standard.

Amidst the Wall Street boom in 1928, Federal Reserve officials began tightening monetary policy in an effort to divert speculative flows to more productive uses. This curtailed American foreign lending and exposed the weak balance of payments positions of many countries, which were disproportionately dependent on US credit to service their debts. Furthermore, policies in other countries were linked to US macroeconomic policy by the Gold Standard. Thus, when the US tightened credit, other Gold Standard countries were forced to follow suit or suffer the consequences of massive capital flight.

Although its restrictive monetary policy was causing distress across the world, the US was reluctant to loosen its economic policy reins. As long as the Wall Street boom persisted, the Fed continued to raise interest rates, which reinforced the rise in rates in Europe and Latin America. Even when the US plunged into recession and the Depression deepened, governments refused to raise public spending, given their commitment to gold. Unilateral monetary expansion or increased public spending would have moved their balance of payments into deficit and threatened the Gold Standard.

The key role played by the Gold Standard in perpetuating the Depression is supported by empirical studies. Choudhri and Kochin (1980) compared the economic performance of four countries outside the Gold Bloc (three Scandinavian countries and Spain) and four countries that stayed on the Gold Bloc (Belgium, Italy, Netherlands and Poland). They found that countries that pegged their currencies to gold suffered significantly sharper declines in output and employment. This was further supported by Eichengreen and Sachs (1985). Their study showed that by 1935, countries that had abandoned the Gold Standard recovered substantially from the Great Depression. On the other hand, the Gold Bloc countries, restricted by their need to maintain gold convertibility, did not have the free hand over their monetary and fiscal instruments needed to pull them out from the recession.

2.5 Although countries fought to maintain convertibility through numerous banking crises and the Great Depression, the international monetary system had split into three blocs by 1932: (a) Dollar Bloc – the residual Gold Standard countries, led by the US; (b) Sterling Bloc – Britain and countries pegged to the Sterling; and (c) Gold Bloc – Central and Eastern European countries, led by Germany where exchange controls prevailed. By 1936, what was left of the inter-war Gold Standard had completely given way to floating exchange rates.

3 **BRETTON WOODS SYSTEM, 1947-1973**

3.1 Unlike the previous international monetary system, the post-World War II system was the result of much detailed planning and debate. The ad hoc reestablishment of the Gold Standard after World War I and its subsequent failure with the onset of the Great Depression had not been forgotten. Furthermore, lessons from the unbridled pursuit of nationalist economic policies during the inter-war years brought to light the benefits to be had from a more co-operative international monetary system.

3.2 In July 1944, representatives of the US, UK and 42 other nations, met at Bretton Woods, New Hampshire to establish an international monetary system for the post World War II era. Although the Bretton Woods negotiations came about because of a need for planning and co-operation, they were underscored by the divergent views held by the British and Americans. The two most active economists in the debate were John Maynard Keynes, whose influential theories had by then permeated much of Europe and the US, and Harry Dexter White, assistant to the US Secretary of Treasury.

The British Proposal

3.3 Keynes's proposals reflected the British emphasis on the need for autonomy in the determination of national objectives of inflation and employment. Keynes envisaged the establishment of an International Clearing Union¹ and his suggestion was for flexible exchange rates accompanied with exchange and trade controls. Britain's reluctance to remove wartime restrictions on current account transactions reflected fears of worsening terms of trade, lower standards of living and the negative sentiment that would follow. Keynes was also wary of destabilising short-term capital flows.

¹ Essentially, Keynes's Clearing Union would (1) create and manage US\$25-30 bn of new international currency used to settle inter-country balances; and (2) pressure countries to correct payments imbalances (e.g. taxing the excess reserves of creditor countries).

The US Proposal

3.4 Although Keynes's theories had a strong influence on the thinking of many US officials, what eventually became the mainstream of US foreign economic policy can be described as "business internationalism" (See Block (1977)). The idea of an export surplus to stimulate the domestic economy was strongly supported. Thus, where the British government viewed the removal of trade restrictions as a move to bring unwelcome competition to the UK, the Americans saw it as a chance to expand its foreign markets and increase its exports. Despite this, the dangers of unfettered capital and trade flows did not go unrecognised. White noted that "the assumption that capital serves a country best by flowing to countries which offer most attractive terms is valid only under circumstances that are not always present" (Block (1977)). Although White argued for reductions in trade barriers, he was against a free trade policy which he felt, came at a price. However, due to strong political opposition from the State Department, which was strongly devoted to reducing foreign barriers to US trade and investment, White was eventually forced to dilute his views.

3.5 White's plan was for the design of a fund or international lending agency with veto power over parity changes under a system of pegged exchange rates. Under normal circumstances, balance of payments adjustment would be achieved through mild disinflationary policies in deficit countries, expansionary policies in surplus countries, and changes in the level of international lending or borrowing financed by the fund.

Reaching a Compromise

3.6 The serious negotiations between the British and Americans on the post-war international financial system began as early as in Sep-Oct 1943. The final "Joint Statement by Experts on the Establishment of an International Monetary Fund" was released in April 1944. The provisions in the Statement largely reflected White's plan, an indication of the asymmetric political power of the two countries.

3.7 A compromise between the US's call for pegged exchange rates and British insistence that they be adjustable resulted in the "adjustable peg". The price of gold was fixed at US\$35 per ounce and all countries were required to declare the par values of their currencies in terms of US Dollars. Their exchange rates were allowed to fluctuate within 1% of that level and only in the event of a "fundamental disequilibrium", following consultations or approval from the IMF, were rates allowed to move by 10% or more. Financing quotas were set closer to the more restrictive targets of the White Plan, and although the Americans gave in to the British requests for capital controls, action to remove current account controls had to be taken after five years. Countries had their policies monitored by the IMF and those making insufficient progress could be asked to leave the Fund. Finally, the British managed to secure a scarce-currency clause that allowed controls on imports from countries that ran persistent payments surpluses and whose currencies became scarce within the Fund.

Collapse of Bretton Woods System

3.8 From the outset, the Bretton Woods system was plagued with difficulties. The restrictive quotas and drawing rights grossly underestimated the costs of the post-war transition. During the IMF's first four years of operation (1948-1951), the US had to provide about US\$13 bn in aid to finance post-war Europe's burgeoning deficit. This was more than six times the maximum US obligation under the "Joint Statement". Countries also struggled to resolve the conflict between maintaining internal and external balance. Britain, for example, had to cope with one balance of payments crisis after another from about 1947 onwards.

3.9 The battered system's eventual collapse was a result of capital market liberalisation and increased leverage of the world monetary gold stock, which exacerbated the asymmetric effects of the US expansionary monetary and fiscal policies. Capital controls had become increasingly ineffective as growth of multinational corporations and the development of the Euro-currency markets provided other outlets for leakage. Such developments and the liberalisation of the world capital markets put pressure

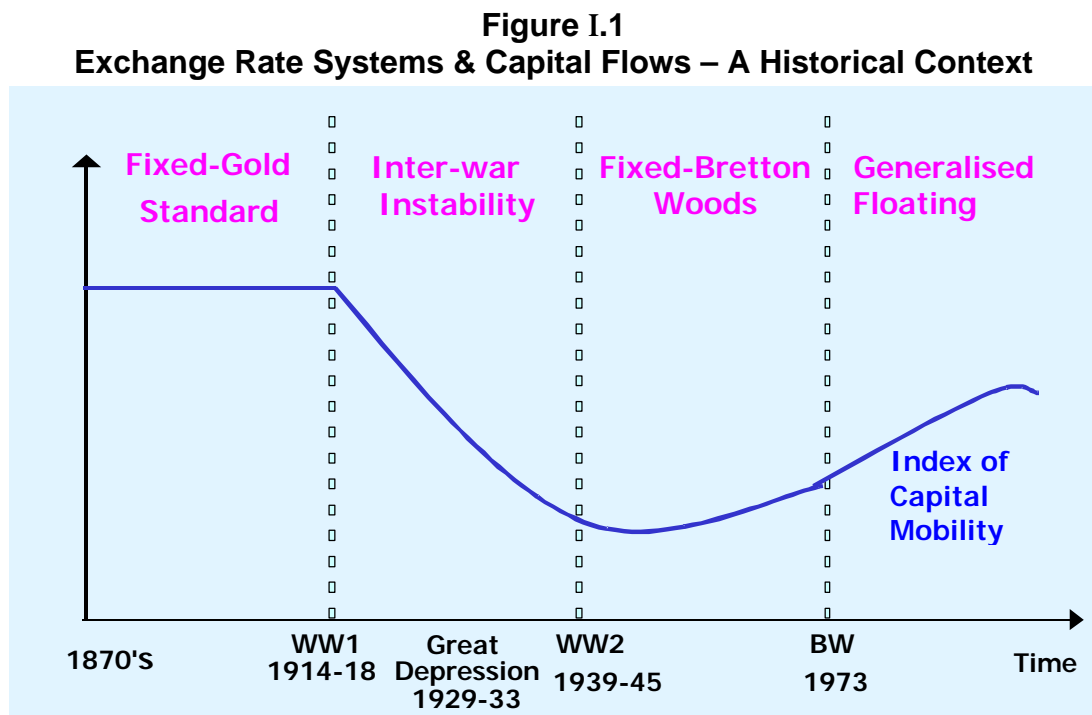
on the system by magnifying the potential for speculative attacks on currencies perceived to be weak.

3.10 In the 1960s, the US set off a trend of monetary and fiscal expansion (partly to finance the Vietnam War and for the rapid development of social programs) and was running persistent deficits in its external accounts. Countries were faced with the option of revaluing their currencies or continue “importing” US inflation. By 1971, the system had been stretched to a breaking point; the ratio of dollars to gold outside the US was too high to maintain the price of gold at \$35 per ounce. In August 1971, the Nixon administration suspended convertibility of gold. Fluctuation bands were widened and the US Dollar was devalued by 8%. However, US policy remained expansionary and having devalued the Dollar once made the peg less credible. Another attack on the sterling in 1972, forced the British to float the sterling out of its band. This was followed by a flight from the dollar in 1973, and soon Germany and its EEC partners jointly floated their currencies upward. The Bretton Woods international monetary system collapsed.

3.11 By March 1973, the world had moved to a system of floating exchange rates and after several failed attempts at reforming the par value system, IMF members began working toward the Second Amendment to the Articles of Agreement to legalise floating. The Amendment came into effect in 1978. Countries were obligated to promote stable exchange rates by fostering orderly economic conditions and the IMF was authorised to oversee the policies of its members.

4 SUM-UP

4.1 The evolution of the international monetary system highlights the difficulties in maintaining a fixed exchange rate amidst large capital flows when governments are faced with competing objectives. The first wave of globalisation from 1870-1914, was characterised by large trade and capital flows (See Figure I.1). These large capital flows before 1914 were evidence of the success of the pre-war Gold Standard, when governments were committed in pursuing their balanced-budget rules and when international support made the fixed exchange rate regime credible.



4.2 The decline in capital mobility beginning in 1914, occurred during the inter-war years when the international financial system was fraught with instability. Governments erected capital controls to contain massive capital outflows caused by their own citizens seeking security from social unrest and reformist government policies. The Great Depression further dampened capital flows.

4.3 However over time, these capital controls became more difficult to enforce. Financial markets had developed under the impetus of the post-war economic recovery. Liberalisation measures were introduced by governments and the application of information technology to the trading infrastructure, meant that funds would move quickly across capital markets in response to changes in investor sentiments. Thus, with neither limits on capital mobility nor limits on democracy to insulate governments from market pressures, pegged exchange rates became more constraining to maintain from about the mid-1960s onwards. The implications of Figure I.1 appears to be that the trend towards greater exchange rate flexibility is almost an inevitable consequence of rising international capital mobility.²

4.4 Third, the breakdown of Bretton Woods shows that it is difficult to sustain fixed exchange rates in a world of high capital mobility. Governments may need insulation from financial markets to preserve some independence over macroeconomic policy. Singapore's experience with the managed float has, however, shown that perhaps some middle option along the continuum running from fixed to floating exchange rates is a viable option, if it is buttressed by strong institutions and consistent macroeconomic policies.

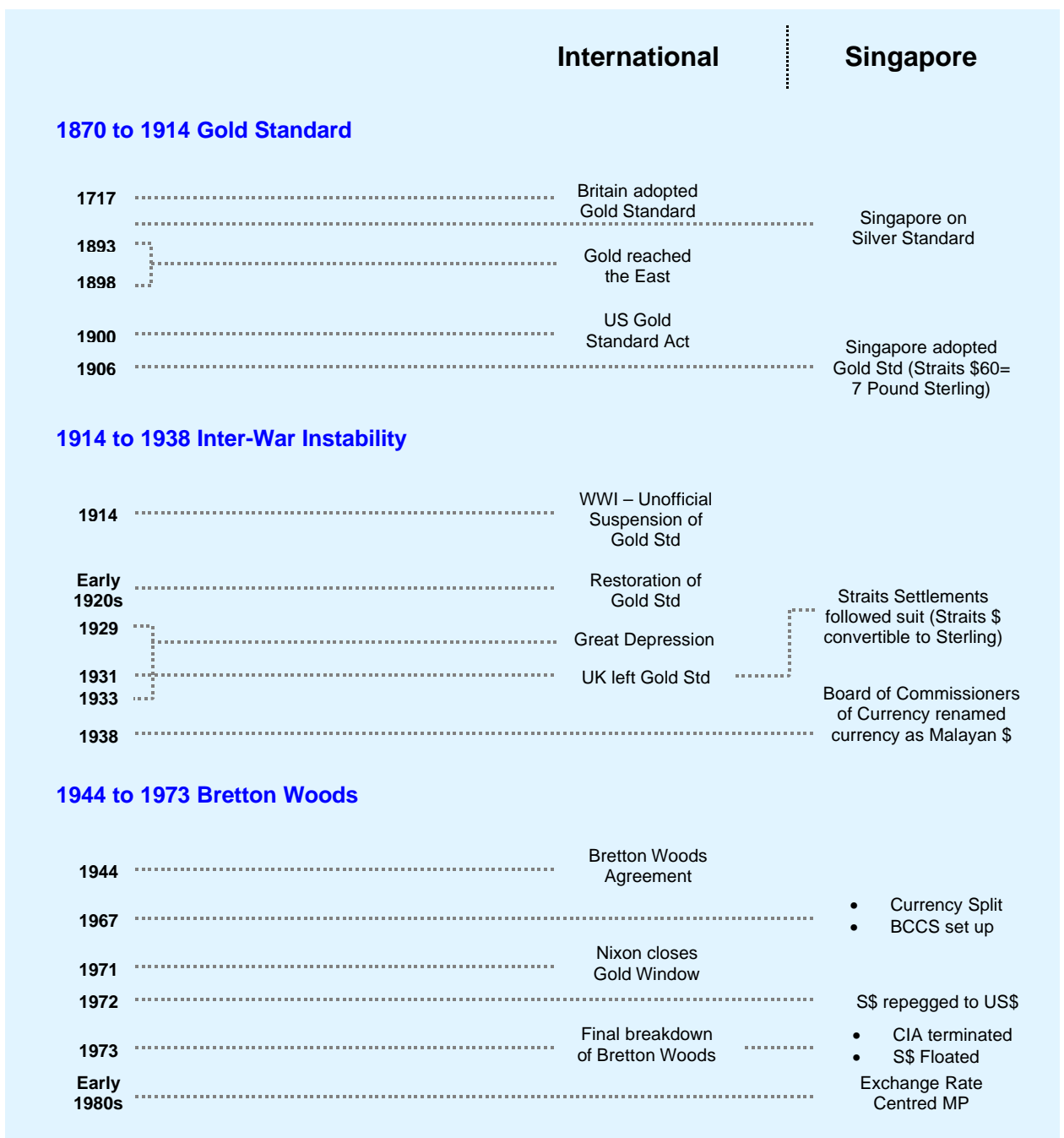
² Alan Blinder recently concurred with this implication in 'Eight steps to a new financial order', Foreign Affairs, Sep/Oct 99.

(II) EVOLUTION OF SINGAPORE'S CURRENCY & MONETARY ARRANGEMENTS

1 INTRODUCTION

1.1 Figure II.1 shows the highlights of Singapore's monetary and currency history against the backdrop of the history of the international monetary system.

**Figure II.1
Key Events in Singapore's Monetary History**



1.2 From the time Singapore was founded, its currency system has followed closely the arrangement of the international monetary system from the Silver and Gold Standards, through the Bretton Woods system, and finally to the establishment of the institutions to support a managed float exchange rate system. The following sections describe the evolution of Singapore's monetary and currency systems since the 1900s.

2 THE SILVER STANDARD, TILL 1903

2.1 Singapore was founded in 1819 by Sir Stamford Raffles and soon after, the British developed the island as an important trading station for the British East India Company. In 1826, Singapore became part of the Straits Settlements comprising Malacca, Penang and Singapore. In these early years, the Colonial administration did not independently issue any coins or notes. Instead various silver coins, including the Mexican Dollar, Spanish Dollar, Indian Rupee and Dutch Guilder became accepted for transactions within the Settlements. These silver currencies came to the region from various sources, in settlement of trade transactions at the Singapore port.

2.2 The use of silver in Singapore was formalised in 1867 when the Straits Settlement became a Crown Colony. Legal status was bestowed upon silver dollars "issued from Her Majesty's Mint at Hong Kong, the silver dollar from Spain, Mexico, Peru and Bolivia and any other silver dollar to be specified from time to time by the Governor in Council". Historians classify Singapore as being under the Silver Standard arrangement from the time the use of silver was legalised in 1867 to about 1903.

2.3 However, the exclusive reliance on external trade settlements as a source of currency, proved to be insufficient to meet the demands of a growing domestic and regional market. Instances of silver dollar scarcity emerged with greater frequency. This led to the issuance of private bank notes from about 1850, by specially licensed banks - the Asiatic Banking Corporation, the Oriental Banking Corporation, the Chartered Bank of India, Australia and China, the Hongkong and Shanghai Banking Corporation, and the Mercantile Bank of India, London and China. These private bank notes were primarily used to facilitate trade between their home countries, and the Straits Settlements. They soon found public acceptance and were increasingly used side-by-side with the silver dollars for domestic transactions.

2.4 However, the confidence in the bank notes proved to be short-lived following the failures of the Asiatic Banking Corporation in 1866 and Oriental Banking Corporation in 1884. The British Colonial Office then contemplated the possibility of issuing legal tender government currency notes for the Straits Settlement that would be redeemable on demand for its equivalent in silver coins. After much study and discussion, the Board of Commissioners of Currency for the Straits Settlement was established on 2 Sept 1897 under the Currency Note Ordinance of 1897. The Currency Note Ordinance was amended in 1899 to make the note-issue entirely a responsibility of the Straits Settlement Government, paving the way for the first government notes to appear in 1899. As the government notes had the backing of the Colonial Administration, they quickly gained acceptance by the public.

3 THE GOLD STANDARD, 1906-1914

3.1 The subsequent adoption of the Gold Standard by the Straits Settlements was driven by the growing trade with the Gold Standard countries in both Europe and Asia, as well as, by the likelihood that other countries that traded with the Straits Settlements would soon follow suit.³ A Straits Settlements Currency Committee was set up in 1902 to look into the merits of such a switch. Its recommendations were set out in the Barbour Plan (named after the Committee Chairman, Sir David Barbour), which aimed at promoting exchange rate stability by (i) switching the Straits Dollar from the Silver Standard to the Gold Standard and (ii) establishing a fixed exchange rate system. These objectives were gradually achieved by 1906 as the Currency Ordinance was amended, eventually fixing the rate of exchange at 60 Straits Dollars to 7 pound sterling. In Sterling equivalent, this turned out to be 2s 4d. The Currency Ordinance also enabled the Straits Dollar to be issued against Sterling tendered on London at a rate that included the costs of buying (or selling gold) in London and shipping it to (and from) Singapore.

3.2 This arrangement raises the question whether the Straits Settlements were actually under the Gold Standard or Gold Exchange Standard (ie. maintaining a fixed parity against an external currency on a Gold Standard). The original legislation was intended to create a Gold Standard, with the fixed exchange rate adjusted for the costs of moving gold to and from Singapore. However, in practice, the ease of buying and selling the Straits Dollar against the Sterling relative to the cost of shipping gold, facilitated the arrangements under the Gold Exchange Standard as well.

3.3 The Straits Dollar was subjected to the increasing uncertainty brought about by the emerging strains on the Gold Standard arrangements among the core European economies through the early part of the 1900s. The outbreak of World War I led to the breakdown of convertibility into gold

³ Eg. Siam (1902), Philippines (1903) and Mexico (1905).

in Europe and a cessation of gold shipments. As a result, the Currency Commissioners suspended the convertibility of the Straits Dollar to gold although the link to Sterling at the prevailing rate was maintained. This marked the end of the link of the Straits Dollar to the Gold Standard and the beginning of the formal peg to the Sterling which lasted till 1967.

3.4 While Europe was preoccupied with its problems in the 1930s, the Straits Settlements grew to accommodate the Malay States in 1938, and later Sarawak, Brunei and North Borneo (now Sabah) in 1950. The Board of Commissioners of Currency was reconstituted to reflect its large purview - this included an amendment to rename the Straits Dollar, the Malayan Dollar.⁴

3.5 The common currency arrangement in the region was continued through the Currency Agreement of 1960 despite Malaya's independence in 1957 and Singapore's self-governance in 1959. A significant amendment in the legislation was the insertion of an 18-month 'notice of replacement' clause, which obligated national currency authorities to give indication of their intention to independently issue their own currency to the Board of Commissioners of Currency. This amendment was introduced with the intention that the Federation of Malaya's Central Bank (formed in 1959) would eventually take over the responsibility of note issue, at least for the Federation.⁵

⁴ World War II occurred soon after the Board of Commissioners of Currency expanded to include the Malay States. During this period, the Japanese military administration issued their military notes (popularly known as banana notes because these notes depicted the banana plants on their faces) at par to the local currency. The inferior Japanese money soon drove out the British notes by Gresham's law, succeeding in transferring the resources from the people at the cost of mounting inflation. With the end of the war, the banana notes were withdrawn and demonetised and the currencies issued under the 1938 Agreement were brought back into use.

⁵ Drake(1969, p96) expresses the view that the common Currency Board was retained even with the formation of the Central Bank of the Federation of Malaya so as to avoid creating an economic obstacle to the political union of the three territories in the form of separate currencies.

4 CURRENCY SPLIT, 1967

4.1 Singapore obtained political independence from Malaysia in 1965. Singapore leaders were faced with four monetary options.⁶ (i) continuation of the Currency Board, (ii) a Central Bank under the joint control of Malaysia and Singapore, (iii) a single autonomous Central Bank with jurisdiction in both countries, or (iv) a separate currency, which meant independent monetary control from Malaysia.

4.2 Singapore was keen to continue with the Common Currency Board as it would help to maintain public and international confidence in the local currency and preserve the long-standing financial, commercial, banking and trade links between Singapore, Malaysia and Brunei. Singapore's leaders desired to develop Singapore into a trading, banking and financial centre in South East Asia and believed that a stable external value of the Singapore Dollar would be supported by a currency board. But Malaysia felt that the cost of a currency board in terms of the loss in monetary independence was too great.

4.3 Malaysia also favoured a single central bank, built on the established Bank Negara.⁷ In the event, the negotiation for a joint central bank broke down as a more fundamental issue arose in the discussion. Singapore wanted separate ownership, control and management of its currency reserves, whereas Malaysia argued for the control and management of the reserves to be centralised under the new central bank. These irreconcilable differences culminated in the dismantling of the common Currency Board in June 1967.

⁶ To consider each of these alternatives fully, the Currency Agreement was amended to allow the Currency Board to remain responsible for currency in Malaysia, Singapore and Brunei until 11 June 1967.

⁷ This meant that while Bank Negara would have had sole responsibility for currency issue, supervision of banking, exchange control and monetary policy in general in Singapore and Malaysia, the Singapore's Minister for Finance would be consulted on matters of policy affecting Singapore.

4.4 Following the currency split of 1967, Singapore, Malaysia and Brunei each issued separate currencies linked to the Pound Sterling at the previous rate of 2s 4d to each national dollar.⁸ This was done to minimise disruptions in the commercial and banking sectors in these countries. Singapore and Brunei, each set up their own Currency Board. Singapore's currency was issued by the newly established Board of Commissioners of Currency, Singapore (BCCS) under the Currency Act of 1967. The legislation provided for the par value of the Singapore Dollar at 0.290299 gm of fine gold, or S\$3.06122 = US\$1.

4.5 However, to maintain some degree of currency cooperation, the three countries agreed on the Interchangeability Agreement of 1967. This allowed the new Bruneian, Malaysian and Singapore Dollars to be used as customary tender⁹ in all three countries. As originally intended, the use of Malaysian Dollars in Singapore and vice versa was transitional, lasting for about six years till 1973.

4.6 The year 1967 was also an eventful one in international financial markets. Britain had devalued its currency by 14.3% in Nov that year, after mounting pressures on its external accounts. Malaysia decided not to devalue, motivated largely by the desire to preserve the gold value of the new Malaysian Dollar (Drake (1969, p229)). Although initially inclined towards devaluing its currency, Singapore also decided against devaluation for the reason that divergent exchange rate policies between Singapore and Malaysia would seriously impede trade and finance of the two territories.¹⁰ Dr Goh Keng Swee had reasoned that although devaluation of the Singapore Dollar would create more export opportunities for Singapore's

⁸ The Dollar in each territory was made equivalent to 0.290299 gm of fine gold.

⁹ Customary tender may be defined as the common acceptability of another currency in a country although it is not legal tender there. Legal tender money is the form of money which is legally recognised for the settlement of debts in that country in which it circulates.

¹⁰ While the Malayan Dollar (issued by the old Currency Board) was allowed to devalue along with the Sterling, the gold parity (0.290299 gm of fine gold) of the new Malaysian and Singapore Dollars were maintained.

manufactured goods, this advantage was likely to be outweighed by the increases in import prices, cost of living and wages.¹¹ A strong stable currency was necessary to maintain investor confidence and guard against imported inflation.

International Monetary Challenges in the 1970s

4.7 The attainment of full monetary independence for Singapore was not to come for another six years and not till the newly established Monetary Authority of Singapore (MAS) had to deal with a number of significant challenges on both the international and domestic fronts. MAS was formed in 1971 under the Monetary Authority of Singapore Act. Before 1970, the various monetary functions associated with a central bank were performed by several government departments and agencies. The demands of an increasingly complex banking and monetary system, however, necessitated streamlining the system so as to enable the development of a more dynamic and coherent policy on monetary matters. This Act sanctioned MAS with the authority to regulate all elements of monetary, banking, and financial aspects of Singapore. Currency issue, however, remained the preserve of the Board of Commissioners of Currency (BCCS).

4.8 Within months of the formation of the MAS, the US Dollar came under intense pressure in international currency markets. In Aug 1971, the US Dollar's convertibility into gold was suspended to redress balance of payments imbalance and enhance domestic investment, production and employment. By mid-Dec 1971, the US devalued its Dollar. The major industrial economies realigned their currencies under the Smithsonian Agreement in Dec 1971. Singapore chose to maintain its peg to the Pound Sterling, implying a revaluation against the US Dollar of about 9%.

4.9 MAS' chief consideration at that time was to maintain confidence in the Singapore Dollar. Singapore's strong balance of payments position, the high import content of its manufactured exports, and

¹¹ From Dr Goh Keng Swee's speech, "Why Singapore did not devalue?", 20 Nov 67.

the currency interchangeability agreement with Malaysia were other factors behind the decision to maintain the peg with Sterling and revalue against the US Dollar.

4.10 The respite offered by the Smithsonian Agreement was brief. The Pound Sterling itself came under speculative attack in 1972. This led to the floating of the Pound Sterling in June that year, and the subsequent dismantling of the Sterling Area. Singapore then switched its parity from Pound Sterling to the US Dollar. The role of Sterling as an intervention currency was made difficult during the post-war period when speculation against the currency increased in frequency and intensity.¹² Also with more countries switching to the use of the US Dollar as intervention currency, a change in parity currency would have helped to integrate Singapore with international financial markets.

4.11 The turbulence in international currency markets affected domestic monetary conditions. An inflow of foreign funds in the wake of the Sterling crisis resulted in excess liquidity in the banking system and growing inflationary pressures towards the end of 1972. Despite efforts by MAS to soak up excess liquidity by raising the minimum reserve requirements on the deposit liabilities of banks and finance companies, monetary growth remained unabated and excess liquidity fuelled asset price inflation and in turn, reinforced inflationary expectations.

4.12 In 1973, the Authority tightened monetary policy by further raising the reserve ratio, imposing special deposit requirements, raising interest rates and engaging in moral suasion on the banks to restrain credit growth. But external events continued to complicate the conduct of monetary policy. There was a major devaluation of the US Dollar in Feb 73 (by about 10%), followed by another heavy speculative attack on the US

¹² The pound actually faced two devaluations, one in 1949 and the other in 1967 and at least 6 major crises of Sterling from 1945 to 1972. But in June 1972, Britain lost large gold and foreign reserves by supporting the pound at parity that she decided to let the Sterling float and attain equilibrium in balance of payments and encourage exports of goods and services.

Dollar, which set off a chain of events that culminated in the final collapse of the Bretton Woods system of fixed exchange rates.

4.13 As the external value of the Singapore Dollar depreciated in line with a weakening US currency, imported inflation crept up. Expectations of revaluation of the Singapore Dollar fuelled a heavy influx of speculative capital into Singapore, further aggravating inflationary pressures. Finally, in Jun 73, Singapore allowed its Dollar to float upwards. This helped to stem the inflow of speculative funds. The floating of the Singapore Dollar in 1973 technically meant that Singapore was, no longer, part of a Currency Board System. Box Item 2 takes up the discussion of the CBS in Singapore.

Box Item 2

Is Singapore Still Part of a Currency Board System?

Many authors hold the view that Singapore continues to operate a Currency Board System (CBS), a view probably fostered by the fact that currency issue is the responsibility of the BCCS, and that Singapore's international reserves are very large.

However, more recently there has been some discussion of whether Singapore does indeed have a CBS (see for example Peebles and Wilson (1996)). Conceptually, there are two important criteria for a CBS:

- (i) The exchange rate between the domestic currency and a foreign currency (the reserve currency) is fixed, and full convertibility of notes and coins at that exchange rate is guaranteed.
- (ii) The domestic money is fully backed by the reserve currency (or by other foreign assets and gold).

Since Singapore's decision to float its currency in June 1973, it no longer satisfied the criteria of a fixed exchange rate system (ie. criteria (i) above).

Moreover, the 1982 Amendment of the Currency Act had repealed key sections relating to the operations of a CBS, including:

- Section 12 which specified the par value of the Singapore dollar (in terms of the weight in gold)
- Sections 16 and 17 which had obligated the BCCS to convert domestic currency notes and coins into gold and other foreign currencies (and vice versa) on demand.

These amendments meant that the BCCS would no longer announce official conversion rates for the Singapore dollar into foreign currencies. Previously under the CBS, the rates decided by the Currency Board determined the market rates, whereas now, the rates of exchange used by the BCCS depend on the current rates in the foreign exchange market. On a day-to-day basis, the Singapore dollar does not have a fixed value against any reserve currency. Hence, Singapore strictly could not have a currency board system operating without the fulfilment of criteria (i).

Dr Goh Keng Swee articulated the main reasons for a currency board system in an article to mark the 25th anniversary of the BCCS.¹ First, he argued that the currency board arrangement was an important way to signal to financial markets, Singapore's commitment to maintain a strong convertible dollar, and protect against imported inflation. Second, the BCCS served to remind Singaporeans that more and better services would have to be paid through taxes and fees and not by printing money.

The BCCS has thus remained as an important part of the currency and monetary arrangements in Singapore. It embodies the government's commitment to consistent, credible and conservative policies.

¹ Dr Goh Keng Swee, "Why a Currency Board?", in Tan, M. (ed), Prudence at the Helm: Board of Commissioners of Currency, Singapore, 1967-1992 (1992).

Termination of Currency Interchangeability Agreement

4.14 In addition to the turmoil in the international currency arena, there were continuing tensions between Malaysia and Singapore over political and economic issues in the early 1970s. This culminated in the announcement by the Finance Minister, Tun Tan Siew Sin, on 8 May 1973, that Malaysia had decided to terminate the Currency Interchangeability Arrangement (CIA) together with the Stock Exchange Split (see Box Item 3). One main reason cited by the Finance Minister was that the continuation of the CIA hindered the development of Malaysian institutions and facilities while favouring the faster development of Singapore as the latter established itself as a financial and trading centre.

4.15 The Brunei government, at that time, decided to continue the Interchangeability Agreement with Singapore and to terminate its agreement with Malaysia. The Brunei Dollar continues to be customary tender in Singapore (and vice versa) today.

Box Item 3

Reporting of the Termination of the CIA

Tun Tan Siew Sin, the Malaysian Finance Minister told the Malaysian Parliament on 9 May 1973 that the Currency Interchangeability Arrangement (CIA) with Singapore had to go because its continuation tended to slow down the development of Malaysian institutions and facilities while favouring the faster development of the Republic as the latter established itself as a financial and trading centre.

"In so far as Malaysia and Singapore are concerned, our economies are basically different." "As of today, Malaysia is mainly a producer of primary commodities though we are making significant progress in industrialisation." "Singapore, on the other hand, is a city state which depends largely on trade and the provision of services, though it too has made substantial industrial progress."

Tun Tan Siew Sin likened the monetary union between Malaysia and Singapore to a pair of Siamese twins trying to grow together normally. He said the CIA was regarded as a transitional phase right from the start.

"Such arrangements cannot be indefinitely maintained if major financial and economic policies within the first two named countries (ie. Singapore and Malaysia) are not at the same time also harmonised."

- The Straits Time, 9 May, 1973

The Malaysian Government sources said "the break (ie. termination of the CIA) had to come sooner or later and since the dollar is at its strongest at the moment, we felt it had to be done now."

- New Nation, 9 May, 1973

Mr Lee Kuan Yew said Malaysia's decision to terminate monetary union with Singapore was unlikely to create any instability for either country.

"No one is ruffled. It (the currency split) is not likely to (produce) any instability in either country on account of it being part of a trend continuing since 1965."

(The 'trend' he referred to included events like Malaysia's ban on log exports to Singapore which almost incapacitated the timber industries in Singapore, the political separation of Singapore from Malaysia in 1965, the split of the former joint airlines Malaysia-Singapore Airlines, the disagreement on the settlement of outstanding balances arising from the repatriation of each country's currency under the CIA, etc.)

- The Straits Time, 12 May, 1973

Oil Shock and Stagflation: 1973-75¹³

4.16 Meanwhile, domestic inflation remained high, as the oil prices quadrupled in late 1973. Overall consumer prices rose by nearly 30% in the first half of 1974. At the same time, the global economy was headed for a slowdown. Singapore faced the prospect of stagflation: a combination of high inflation and low growth.

4.17 As a matter of priority, monetary policy was aimed at curbing inflation. MAS imposed credit ceilings on banks and finance companies, together with selective credit guidelines. With inflation moderating in the second half of 1974, monetary policy was gradually eased to support growth. Reserve requirements were reduced, credit guidelines removed, and the appreciation of the Singapore Dollar moderated. Although the manufacturing sector posted negative growth, the overall economy avoided recession and managed to grow by 4 % in 1975. Inflation averaged 2.5 %.

4.18 The second half of the 1970s was marked by sustained and healthy economic growth, against a background of low inflation. In view of the contractionary impact of government's fiscal operations, monetary policy of MAS during this period was directed largely at re-injecting adequate liquidity into the banking system. This was done by monitoring a variety of intermediate targets such as the monetary base, interest rates, loan growth, the trade-weighted exchange rate of the Singapore Dollar, as well as, a few important bilateral exchange rates. However, over the years, MAS has increasingly relied on the operations in the foreign exchange and domestic money markets rather than changes in reserve requirements and credit guidelines, to influence liquidity and monetary conditions. The dismantling of the interest rate cartel in 1975 and liberalisation of exchange controls in 1978 were consistent with this broader shift in emphasis away from direct controls. This shift in monetary operation was also guided by Singapore's aspiration to become a major international financial centre.

¹³ This section and the next are based loosely on material in the MAS Annual Report 1995/96.

5 MONETARY POLICY IN THE 1980s/1990s: A BRIEF REVIEW

5.1 In the early 1980s, there was a shift in the instrument of monetary policy. MAS focused on exchange rate management instead of targeting money supply or interest rates with the focus on promoting sustained and non-inflationary growth of the economy. The use of the exchange rate as the tool of monetary policy was predicated on Singapore's high degree of openness to trade flows¹⁴ which implies that movement in the domestic currency could have a powerful impact on the domestic price level.¹⁵

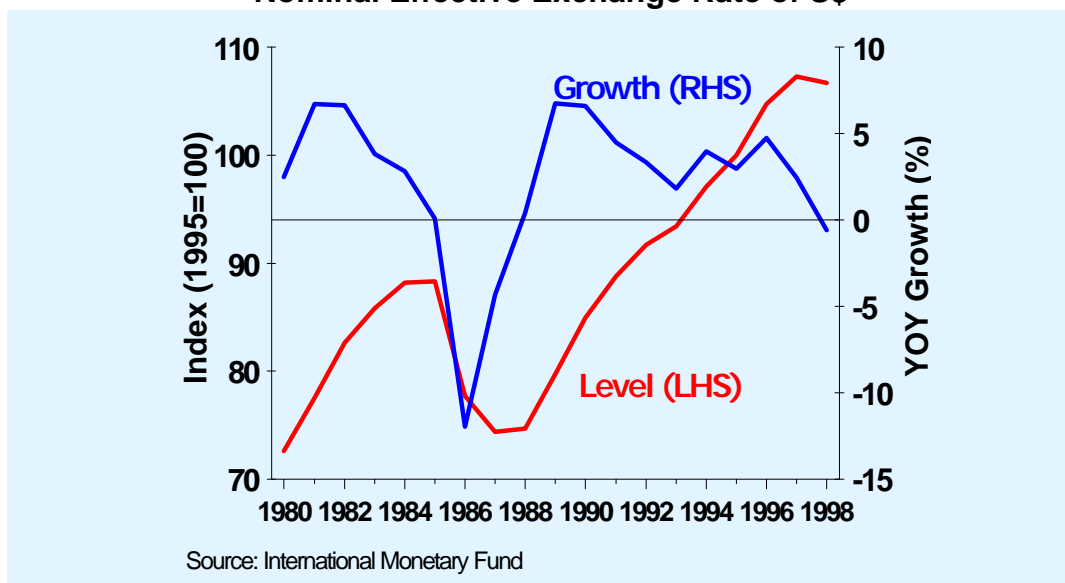
5.2 Over the years, Singapore's nominal effective exchange rate (NEER) has helped to shield Singapore from the pressures of imported inflation and a tight labour market. The NEER has appreciated by a cumulative 31% over the period 1990 to 1997. (See Figure II.2).

5.3 The highly inflationary environment of the early 1980s was mainly due to the second oil price shock, as well as, a high rate of domestic nominal wage increase. Capital flows were also particularly high in 1980, and this exacerbated inflationary pressures in the economy. By allowing the NEER to appreciate, MAS was able to prevent the type of imported inflation experienced during the first oil shock of 1973-74. Inflation in Singapore averaged around 6% per annum during 1981-82, well below the OECD average of nearly 11% per annum.

¹⁴ Excluding entrepôt trade, both imports and exports of goods and factor services exceed 100% of GDP. In fact, imports and non-oil exports account for about 60% and 70% of domestic expenditure respectively (MAS(1992)).

¹⁵ Using a theoretical model, Corden (1984) argues that monetary policy is most effective for a small and open economy if it adopts the exchange rate as its intermediate target and price stability as its ultimate target.

Figure II.2
Nominal Effective Exchange Rate of S\$



5.4 Singapore's first recession occurred around 1985, precipitated by a number of factors: deterioration in export competitiveness, cyclical downturn in the electronics, ship-repairing, regional tourism and entrepot trade, and the collapse of the construction boom. The NEER depreciated very sharply and then gradually appreciated after that. The dramatic easing of domestic inflation in 1986-87 and the easing of import prices with the oil price collapse led to a sharp depreciation of the exchange rate, assisting in the recovery of the domestic economy. The Singapore government also helped to restore Singapore's competitiveness by designing a package of cost cutting measures. This included measures to reduce labour costs such as a 15 % reduction in the employers' contribution rate to CPF, and a two-year wage restraint.

5.5 As the Singapore economy recovered quickly from the 1985 recession, strong inflationary pressures started to build up both domestically and from abroad. MAS allowed a trend appreciation of the Singapore Dollar in line with the rapid growth of economic activity. This contained inflationary pressures and prevented the economy from overheating through the 1990s at a time when real GDP growth averaged just under 8 % per annum.

5.6 The Asian financial crisis, which started with the devaluation of the Thai Baht in Jul 97, necessitated an adjustment in macroeconomic policy. The MAS adopted a more flexible approach in managing the exchange rate in light of the increased uncertainty in the regional financial markets, as well as, the rapid downturn in economic activity. The MAS widened its exchange rate policy band, to enable it to manage the exchange rate more flexibly in the more volatile foreign exchange market. The subdued inflationary environment also allowed an easing of exchange rate policy to cushion the economy from the adverse effects of the crisis and facilitate its recovery.

6 SUM-UP AND CONCLUSIONS

6.1 This historical account has taken us through the various phases in the path towards eventual monetary independence in Singapore. Throughout history, Singapore has sought to maintain confidence in the value of its currency as a means to buttress its image as regional trading centre. From the Silver and Gold Standards right to the time of the Bretton Woods, Singapore 'imported' monetary discipline and credibility by pegging our currency to the various external anchors prevalent in the international monetary system of that time. With generalised floating after 1973, Singapore quickly built-up its credibility in currency management, and as financial markets became more developed through the 1980s, the MAS was then able to put in place the institutions to support a managed exchange rate system. The discussion also highlighted that Singapore's monetary history has been closely intertwined with the developments in international financial markets.

6.2 To conclude, we can draw a number of lessons or implications from the historical review. First, decisions regarding monetary and currency arrangements can be heavily influenced by political considerations. For instance, we saw how the spread of universal suffrage in Europe made it more difficult for governments to maintain a fixed exchange rate system. Singapore's path to monetary and currency independence in the 1960s was also dictated by the sometimes tumultuous political relations with Malaysia. At times, economic criteria alone may have suggested a certain decision on monetary and exchange rate matters, but socio-political factors, may intervene in the policy makers deliberations.

6.3 Second, episodes in monetary history show that mistakes in monetary and exchange rate policy can create substantial damage to the real economy. The restrictive monetary policy of the Federal Reserve, in conjunction with the operations of the Gold Standard in Europe was a key mechanism on the propagation of the Great Depression in the 1930s. The Asian crisis offers a more recent example. It may be argued that monetary

conditions in some of the Asian countries were too easy in the first half of the 1990s because monetary policy in these countries was tied to that of the US through the exchange rate peg. The easy monetary condition in the US at that time was transmitted to the Asian economies and led to the build-up of excess demand conditions in these countries.

6.4 Third, the historical account illustrates that the exchange rate system of a country is often an endogenous outcome of domestic and external factors. Nonetheless, while an appropriate exchange rate regime facilitates the achievement of macroeconomic stability, it does not safeguard against the country's vulnerability to speculative pressures. The Asian crisis has highlighted the importance of backing up the exchange rate system with sound, consistent and credible macroeconomic policies, and robust financial institutions.

6.5 The importance of this point has been highlighted by MAS' own experiences over its 25-year history, as it sought to ensure the macroeconomic stability of the economy, and safeguard the soundness and integrity of the financial system. The MAS adopted a number of key guiding principles which included: (i) adopting a medium to long term perspective when making policies; (ii) ensuring an ethos of fiscal prudence within the government, which helped the MAS in its task of preserving the value of the currency; and (iii) recognising that confidence is the key to modern financial systems. Although central banks would need to adapt their strategies to changing circumstances and conditions, the fundamentals of prudence, stability and confidence will continue to be the relevant guiding philosophy in currency and monetary policy management in the future.

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Note : This survey has drawn heavily from various sources. The principal references are listed below.

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