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THE ASIAN DOLLAR MARKET

by

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I. The Establishment and Promotion of the Asian Dollar Market

Since October 1968, the foreign and indigenous banks in Singapore have developed a market in Euro-dollars. Although referred to as the Asian dollar market, it is really an Asian-based market in Euro-dollars, there being no basic difference -- other than the geographical aspect -- between Euro-dollars and Asian dollars. Nevertheless, because the term "Asian dollar market" (ADM) is now widely used and is also helpful in denoting the geographical context of the market, it will be employed throughout this paper rather than such terms as "Asian currency market," or "Asian-based Euro-dollars."

Euro-dollars are dollar-denominated deposit liabilities of banks outside the United States. The phrase is somewhat unfortunate in that the banks maintaining deposits of this type are not confined geographically to the European continent, but also operate elsewhere, such as in Lebanon, Canada and the Bahamas -- to mention only three non-European countries. Thus, the term Euro-dollars should be understood as including a wider frame of reference than Western Europe, even though this area accounts for the bulk of the Euro-dollar operations.

There is also a market in Euro-Marks, Euro-Francs and other European currencies which is similar to the one for Euro-dollars. This broader market encompassing both Euro-dollars and European

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* The views expressed herein are solely those of the author and do not necessarily represent the views of the Federal Reserve System.

currencies, is generally referred to as the Euro-currency market, and a similar market exists in Singapore, since the Singapore market is not confined to dollar-denominated deposits. However, the phrase "Asian dollars" will nevertheless be used in this paper to refer to Singapore-based, Euro-currencies.

Before discussing the specific characteristics of the Asian dollar market, it is useful to indicate the various factors which played a role in the establishment of the market in Singapore. These are discussed in the four sections which follow. They are explained in considerable detail since many persons do not understand why Singapore is particularly suited to be a financial center and also to indicate what specific practical measures a country can take to develop as an international financial center.

A. Local Factors that Favored Singapore as a Site for the ADM

In mid-1968 there were present in Singapore a configuration of factors that made the city-state one of the best candidates in the Asian area for the establishment of an Asian dollar market.

Well-developed financial system. -- One of the more important factors was that in mid-1968 Singapore possessed a well-developed banking and financial system capable of providing a wide variety of financial services. At the time there were 35 commercial banks including 25 foreign branch banks. Although the domestic money and capital markets were modest and relatively underdeveloped, Singapore by this time had clearly developed the capacity to undertake a wide range of commercial and financial activities.

Absence of inhibiting controls. -- Another favorable factor, stemming from the Government's predilection for the maintainance of free markets, was the near absence of inhibiting controls on domestic and international transactions. This meant that funds were basically free to move in and out of the country with a minimum of exchange control. Beginning about August 1968 and in the following years, measures were taken to liberalize or eliminate certain regulations that might inhibit the growth of the market. These actions are detailed in Appendix A.

Stable government and social system. -- Although still relatively young as an independent country,[1/] Singapore -- by mid-1968 -- had demonstrated that it possessed both a stable government and a stable social system. It had achieved an impressive record of rapid economic growth and good economic management, aided by its declared policy of promoting foreign investment and a free and open economy.

Favorable geographic location and time overlap. -- Singapore is also blessed with a favorable geographic location in Asia, being near the center of non-Communist Asia in the wide arc extending from Pakistan, down through Southeast Asia, and up to Japan. Thus, Singapore is relatively close to such Asian financial centers as Manila, Hong Kong, Kuala Lumpur, and Bangkok. In addition, Singapore -- unlike Hong Kong and Tokyo -- has an important time overlap in its business hours with European financial centers. When the London market opens at 9:00 a.m.,

1/ Singapore became an independent country on August 9, 1965.

it is 4:30 p.m. in Singapore, and this allows the dealers in Singapore to contact their counterparts in London, Zurich and other European financial centers. They are thus able to obtain firm Euro-dollar rates and consummate transactions without having to wait for an overnight execution of an order. With exchange rates somewhat more volatile in recent years as a result of the widespread system of floating rates, the same-day consummation of transactions constitutes an additional advantage in doing business in Singapore.

Excellent communication facilities. -- Singapore also has the advantage of having an excellent communications network via telex and telephone with the world's major financial centers. These facilities have been strengthened by the completion of a satellite earth station on Sentosa Island (located a half mile south of Singapore) for an even better system of global communications.

B. Regional Factors Favoring the Development of an ADM

In addition to the favorable factors cited above which the Singapore economy possessed in mid-1968, there were also several regional factors present in the 1960's that were conducive to the development in the region of an Asian dollar market. One of these was the rapid rate of economic growth that had been achieved by a number of countries in the region. With new and dynamic industries being established, this created attractive lending opportunities for the banks that eventually began to operate in the Asian dollar market.

1/ Singapore became an independent country on August 9, 1965.

In addition, the de facto dissolution of the Sterling Area in the late 1960's tended to reduce the ready availability of funds for those Asian countries with sterling area ties. Thus, there was a need for additional sources of finance -- a need which could be met, in part, by Asian dollar credits.

Another favorable factor was that financial institutions located in the region would have an advantage over non-regional institutions in developing local deposit sources and identifying appropriate borrowers. In addition, the local financial institutions would usually be in a more favorable position for assessing the economic and political trends in the area than the institutions outside the region.

C. Why the Promoters Felt an ADM Would be Viable

In addition to the factors cited above, there were other factors influencing the promoters of the ADM in the late 1960's which led them to believe that such a market would be viable. One of these was the belief that there were fairly large sums of convertible currencies in the hands of Asians and non-Asians domiciled in Asia that could be tapped as a source of funds for the market. It was also thought that since there were many small firms in need of funds that could not obtain them very readily from sources outside the region, these firms would provide attractive lending opportunities for the banks operating in the Asian dollar market.

Lastly, the promoters felt that in view of the Euro-currency banks' tendency to favor fairly large transactions, Asian lenders with small sums could find attractive investment opportunities in the Asian dollar market. Under present arrangements, Asian dollar deposits in amounts as small as $5,000 are currently accepted by banks operating in the market, in contrast to the considerably higher minimums required by most Euro-currency banks in Europe.

D. Measures Taken by the Government of Singapore to Promote the ADM

Despite all of these favorable factors, it is probably no exaggeration to say that Singapore's Asian dollar market would not have been viable unless the Singapore Government[1] had deliberately taken certain measures to promote the market. An absolutely essential step was the elimination of the withholding tax on interest paid on Asian dollar deposits. Since funds placed with the Euro-currency markets outside Asia have not been subject to withholding taxes since the inception of the market, this step was essential in order to make Asian dollar deposits fully competitive with those placed in the Euro-currency market.

Many other measures, of course, have also been taken by the Government of Singapore to promote and develop the market. Most of these are detailed in Appendix A in chronological order. Although no attempt has been made to indicate the relative importance of each measure, there is little doubt that all of these actions taken together helped considerably to promote the growth of the market.

1/ Including the Monetary Authority of Singapore, a central bank-type institution, which was established at the beginning of 1971.

Some of the more important measures, besides the elimination of the withholding tax on interest paid on Asian dollar deposits, included: (1) an authorization by the Government for the Asian dollar banks to issue certificates of deposit denominated in U.S. dollars; (2) removal of the minimum liquidity ratio requirement against foreign currency deposit liabilities that the banks had to observe; (3) authorization for the Asian dollar banks to make foreign-currency loans to locally incorporated firms against export orders or letters of credit; and (4) authorization for Singapore residents to hold foreign-currency denominated deposits with the Asian dollar banks up to a certain maximum amount.

Since the late 1960's, new foreign banks have been allowed entry into Singapore -- including the Asian dollar market, but on an increasingly more restrictive basis. This has been accomplished through increasingly restrictive bank licensing procedures, so that at present there exist four types of banking licenses. These are: (1) a complete banking license; (2) a restricted license; (3) a license for offshore operations; and (4) a license to carry out a merchant banking operation. Complete banking licenses are held by those foreign banks that had established branches in Singapore by February 1964. In general, no new licenses were granted to foreign banks during 1965-69. During 1970-72 and early 1973, restricted licenses were granted to foreign banks, and, beginning in March 1973, licenses were granted to foreign banks to engage in offshore operations. (See Appendix A, "March 1973" entry, for details on the particular restrictions.) Roughly two-thirds of the banks that have been granted merchant banking licenses have also obtained permission to accept foreign-currency denominated deposits.

It is readily evident from the rather lengthy list of government actions detailed in Appendix A that the Singapore authorities have taken fairly frequent, and often substantial, measures to promote the development of the Asian dollar market. As will be indicated in the following section, the number of foreign and local banks participating in the market has grown significantly since the market's inception.

II. Asian Dollar Banks, ACU Accounts and Interest Rates

A. Origin and Growth of the Asian Dollar Banks

The bank which first initiated the moves in the spring of 1968 that led to the establishment of the Asian dollar market was the Singapore branch of the Bank of America. Convinced that favorable opportunities existed for the establishment of such a market -- in line with the encouraging factors discussed in the previous section -- the Bank of America proposed to the Singapore Government that it be allowed to establish a new and separate department. This department would be licensed to accept non-resident foreign currency deposits, to pool the funds thus obtained, and to lend these funds to non-resident corporate and individual borrowers.

The Singapore Government welcomed the proposal, and after taking the necessary administrative actions, licensed the Bank of America to establish an Asian Currency Unit (ACU)[1] within the bank to carry out the proposed operations. The Government stipulated that all ACU transactions should be recorded in the bank's special ACU accounts and that they should be kept separate from the bank's other transactions. In addition, the head office of any ACU bank is required to provide the Monetary Authority of Singapore with a commitment that it will make up for any shortfall in liquidity suffered by the ACU bank. After receiving government approval, the Bank of America began its ACU operations in October 1968,[2] quietly and without fanfare. Later, in April 1969, the First National City Bank of New York announced that it was also interested in establishing an Asian Currency Unit. By October 1969, the Singapore Government had licensed the Singapore branch of the Chartered Bank to establish an ACU operation and this was followed shortly thereafter by the licensing of three more banks, <u>viz.</u>, the Singapore branches of the First National City Bank, the Hongkong and Shanghai Banking Corporation, and the Bank of Tokyo.

During the 1970's the number of authorized ACU banks increased substantially. Some idea of the year-to-year rate of growth in the ACU banks is provided by the following data which indicate the number of

1/ An "Asian Currency Unit" (or ACU) is the formal name used by the Singapore authorities for the convertible foreign currency deposit accounts maintained by the Asian dollar banks. Banks maintaining these accounts will be referred to as ACU banks.
2/ S.Y. Lee, "The Asian Dollar Market in Singapore," <u>The Malayan Economic Review</u>, Singapore, April 1971, p. 46.

authorized ACU banks at the end of the year: 11 (1969); 16 (1970); 21 (1971); 24 (1972); 46 (1973), and 56 (1974). By July 1975 there were a total of 61 authorized ACU banks. These consisted of 6 local banks, 13 foreign branch banks with complete licenses, 12 foreign banks with restricted licenses, 17 offshore banks and 13 merchant banks.1/

A complete list of Singapore's banking institutions as of December 31, 1974, is provided in Appendix B with a breakdown of ACU banks and non-ACU banks. In addition, a further breakdown is provided of local banks, foreign branch banks with complete licenses, foreign banks with restricted licenses, offshore banks and merchant banks.

With more than 80 banking institutions now operating in Singapore, there would appear to be little doubt that the number of new bank licenses issued by the authorities will tend to decelerate in the years ahead. It is doubtful that the authorities will inaugurate a fourth, even more restictive, type of license, than the "complete", "restricted," and "offshore" licenses which have been issued so far.

B. <u>Types of Deposits and Conditions</u>

On October 1, 1968, the market in Asian dollars was initiated in Singapore when the first ACU bank began to accept foreign currency deposits.2/ In order to encourage the development of the market, the first ACU banks to operate in the market waived the collection of any

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1/ Singapore's merchant banks operate in a manner similar to those in London, offering such specialized services as corporate finance, underwriting and portfolio management.
2/ <u>Banking Structures and Sources of Finance in the Far East</u>, Research Unit of the <u>Banker</u>, London, 1974, p. 96.

commission, handling or service charges.[1] Initially, deposits were accepted only from entities other than Singapore residents, and the ACU banks were not required to report such deposit transactions to the authorities. Although Singapore's Banking Act of 1970 permits banks -- at their option -- to accept secret numbered accounts similar to those maintained by Swiss banks, this provision of the Act has never been implemented, apparently because of estate tax problems. In Switzerland, the estate tax problems can be overcome by the power-of-attorney device, but the Singapore laws (wich were inherited from the British) require the disclosure by the banks of the deceased depositor's identity to the tax authorities.[2]

The ACU banks are authorized to accept 14 specified foreign currencies as deposits and to trade in these currencies.[3] These are listed below.

1. Austrian Schilling
2. Belgian Franc
3. Canadian Dollar
4. Danish Kroner
5. Deutsche Mark
6. French Franc
7. Italian Lire
8. Japanese Yen
9. Netherland's Guilder
10. Norwegian Kroner
11. Portuguese Escudo
12. Swedish Kroner
13. Swiss Franc
14. United States Dollar

1/ The Asian Dollar Market, First National City Bank, Singapore, May 1971, p. 3.
2/ Asia 1973 Yearbook, Far Eastern Economic Review, Hong Kong, 1972, p. 67.
3/ In addition, the ACU banks are authorized to accept Scheduled Territory currencies, including the British pound sterling, from External Accounts. For additional details, see Twenty-Sixth Annual Report on Exchange Restrictions, International Monetary Fund, Washington, D.C., 1975, pp. 414-6.

Roughly 90 per cent of the foreign currency deposits reportedly consist of U.S. dollars,[1] with the remainder being mainly in Swiss and French francs, the Deutsche mark, yen and guilders. This U. S. dollar proportion is higher than in the Euro-currency market in Europe where the share has been fluctuating around 75 per cent in recent years. Among the banks operating in the Asian dollar market, the American banks tend to dominate because of their natural U.S. dollar base.

As indicated earlier, there are restrictions on the types of deposits that certain banks in Singapore can accept. These restrictions depend on the type of license that a bank has received from the authorities.

Those banks with a <u>complete license</u> are allowed to carry out a full range of banking activities, including the acceptance of all types of deposits as defined in the Banking Act of 1970 except for one restriction. This is that the setting up of any new branch offices requires specific approval from the Monetary Authority of Singapore.

Foreign banks having a <u>restricted banking license</u> are permitted to accept fixed deposits (time deposits) only in amounts exceeding S. $250,000 per depositor, and they are not allowed to operate savings accounts. Though they are permitted to conduct current account operations (i.e., to accept demand deposits), this privilege is not to be regarded as an authorization to accept deposits of amounts under S. $250,000.

1/ "Asian Dollar Market," <u>International Currency Review</u>, London, May-June 1973, p. 21.

Except for these restrictions, the banks may operate normal banking facilities. Most of the banks with restricted license are wholesale- rather than retail-oriented. They operate in the Asian dollar market for the funding of their loan portfolios in Singapore dollars.

Those banks with an offshore banking license are prohibited from operating both current and fixed-term Singapore dollar accounts. They fund themselves from the Singapore interbank money market and are allowed to extend only medium-term loans of over S. $1 million per borrower. These banks are expected to concentrate on external business for the benefit of the region and the Asian dollar market in Singapore, and to avoid domestic business in order to forestall excessive competition in the very adequately-banked domestic sector of the Singapore economy.

As indicated earlier, about two-thirds of the banks with merchant banking licenses have been authorized to establish ACU accounts and to operate in the Asian dollar market.

Turning next to the specific types of deposits offered by the ACU banks, these range from call deposits to five-year time deposits. The minimum amount for deposits, and the intervals at which interest is calculated, vary from bank to bank and from party to party. To provide some idea of the types of deposit maturities, however, the types and maturities offered by one of the ACU banks[1/] are listed below.

1/ Singapore International Merchant Bankers Limited.

Call Deposits

2 Day's Notice -- repayable on two days' notice from either party after a minimum of four days duration from deposit.
7 Day's Notice -- repayable on seven days' notice from either party after a minimum of seven days duration from deposit.
Fixed Deposits -- 7 days, 14 days;
1, 2, 3, 4, 5, 6, 9 and 12 months;
2, 3, 4 and 5 years.

Rates can also be quoted for intermediate periods, adjusted to suit the depositor's requirements. Interest is paid monthly and on maturity.

The two- to seven-day notice deposits are designed for banks and large commercial firms that have excess funds for a very short time, the minimum deposit usually being $100,000. For smaller non-bank firms and individuals, the minimum period is for seven days. For time deposits of one month or more, some banks will accept a minimum deposit of $5,000.

The most common maturities tend to range from one to three months. The average deposit maturities in Singapore are reportedly shorter than in the European Euro-currency market.1/

In August 1970, one of the ACU banks introduced negotiable certificates of deposit (NCDs) for investors in the Asian dollar market and promoted the development of an interbank market in NCDs.2/ The Monetary Authority of Singapore also furthered the expansion of the NCD market by abolishing (in March 1972) the stamp duty on certificates of deposit and encouraging the establishment of three discount houses

1/ "The Singapore Asian Dollar Market," World Financial Markets, Morgan Guaranty Trust Co., New York, March 1973, p. 11.
2/ The Asian Dollar Market, First National City Bank, Singapore, 1971, p. 5.

in November 1972, with the latter being authorized to deal in NCDs.

The NCDs in Singapore are issued in bearer form and have the advantage, of course, that they can be sold by the bearer at any time before the maturity date. The seller of the NCD does run the risk of a possible capital loss, however, if interest rates have increased since the time of purchase. The minimum denomination for the NCDs is reportedly $5,000. The demand for the certificates has been relatively limited, and no active secondary market in them has yet developed, mainly because the ACU banks have not imposed penalties on customers making early withdrawals of standard time deposits.

C. Asian Dollar Interest Rates

The interest rates paid on ACU deposits are not subject to any legal ceilings, but fluctuate freely. In practice, the rates paid in Singapore are determined by the rates paid on Eurodollars in London and Europe, with these rates reflecting the free interplay of market forces. The opening quotations in the Singapore market are the previous day's closing rates for Eurodollars in London and Europe.1/ During the day there are only minor fluctuations in the rates until late in the afternoon when trading between Singapore and London/Europe commences. Then any difference in the rates between the two markets quickly disappears and the rates equalize at whatever level the Eurodollar market dictates.

1/ During the second half of 1974, however, some ACU banks began to quote deposit rates independently and to take positions based on their own assessment of market conditions. The presence of nine international money brokers in Singapore has contributed to this change. See Far Eastern Economic Review, Hong Kong, September 26, 1975, p. 38.

Most quotations on deposit rates consist of the bid and offer interbank rate. Although the rates in the Asian dollar market closely parallel those in Europe and London, the rates paid on deposits by the ACU banks are not necessarily uniform. Deposit rates are reportedly calculated on a 360-days-a-year basis.1/ The table below indicates the rate structure that prevailed on October 13, 1975.

Table 1. Deposit Rates: Singapore Asian Dollar Interbank Market

	Offer	Bid
Overnight	5-3/4	5-5/8
Two to three days	5-3/4	5-5/8
Three to four days2/	17	16-7/8
Seven days, fixed	5-7/8	5-3/4
One month	6-1/4	6-1/8
Two months	6-1/2	6-3/8
Three months	7-5/16	7-3/16
Four months	7-1/2	7-3/8
Five months	7-3/4	7-5/8
Six months	7-7/8	7-3/4
Nine months	8-3/4	8-1/4
Twelve months	8-5/8	8-1/2

Most depositors tend to place their funds for periods of one month or more because of the higher rates received on those deposits. As might be expected, the rates on six- to twelve-month deposits are less volatile and fluctuate in a narrower range than the rates for shorter-term deposits.

1/ The Asian Dollar Market, First National City Bank, May 1971, p. 5.
2/ The significantly higher rates quoted reflects the fact that in this case the borrowing ACU bank can utilize the funds for three to four days, plus the period over the weekend, before settlement.

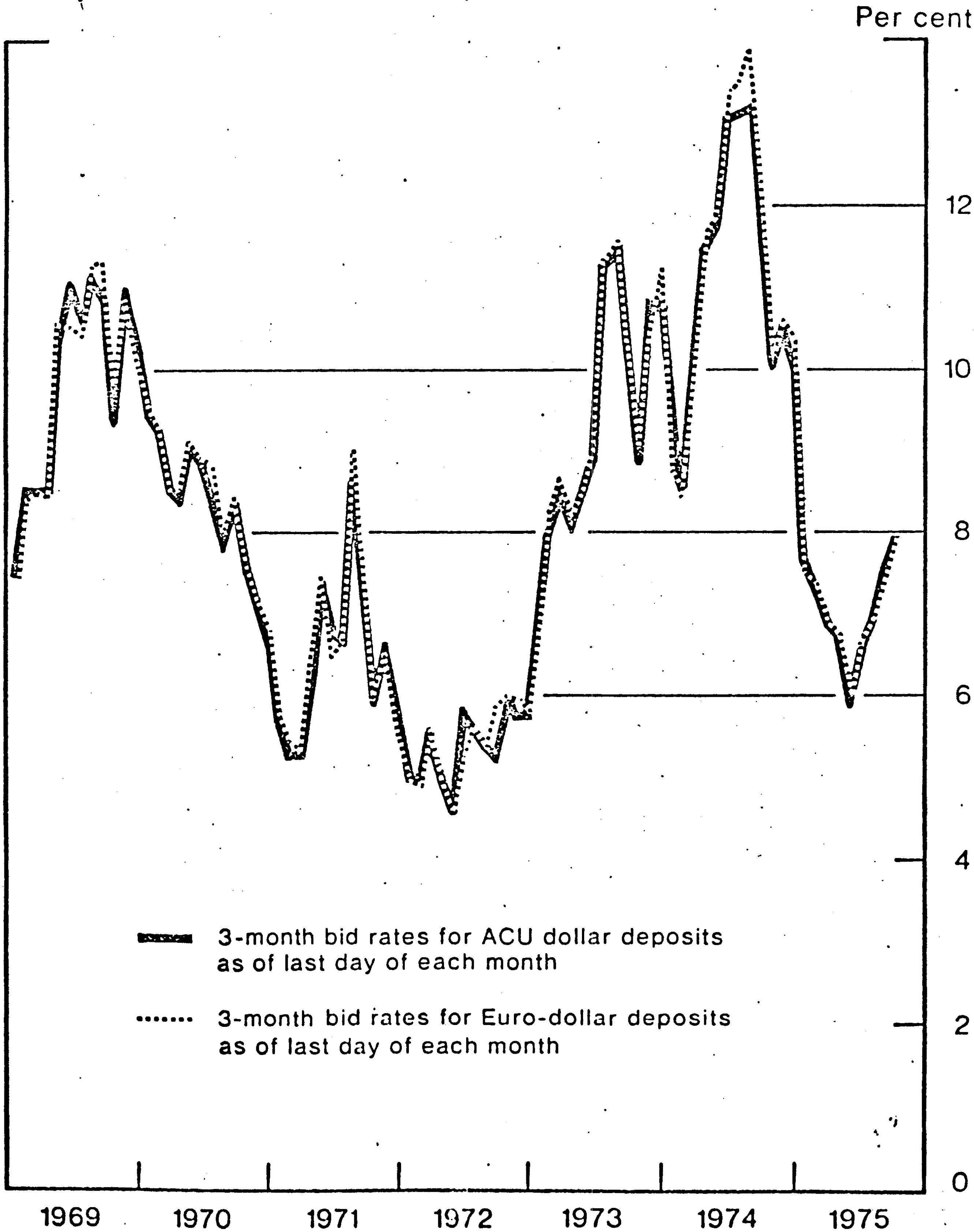
The trend in the three-month bid rate for ACU dollar deposits since January 1969 is presented in Chart 1 along with the three-month rate for Euro-dollars in London. It is evident from the chart that the rate for Asian dollar deposits parallels quite closely that for Euro-dollars in London. As indicated earlier, the Singapore rate is basically determined by the prevailing rate in London.

Several other points merit comment. One is that the rates can, and do, change substantially from month to month. In 1973, for example, the rate jumped from 8-7/8 per cent at the end of June to 11-1/4 per cent at the end of July. Another point is that the rate trends roughly approximate the various stages of the economic cycle in the United States. Thus the 1970 recession in the United States is mirrored by a decline in the rate, while the economic upswing in 1973 finds its counterpart in a rise in the rate during the first three quarters of that year.

Turning next to the interest rates on Asian dollar loans, a distinction can be drawn between the interbank rates and those for non-bank borrowers. The rate of interest on interbank loans is known as the SIBO rate, or Singapore Interbank Offer rate. Corporate borrowers pay a premium over the SIBO rate commensurate with the lending bank's assessment of the credit risk involved. For first-class corporate borrowers, the premium may be as low as 0.75 percentage points, while for higher-risk borrowers, it may be as high as 3.0 percentage points. According to one source, a fairly common premium is one that is 1.5 to

CHART 1

3 - Month Deposit Rates



2.0 percentage points higher than the rate on deposits.[1/] However, the spreads between the SIBO rate and the loan rate do fluctuate substantially over time.

One interesting aspect relating to the impact of the level of loan rates on the geographical distribution of Asian dollar loans is the change that occurred during the first half of 1971. During the early years of the market, when the Asian dollar loan rates were generally higher than the domestic interest rates in many Asian countries, the volume of loans to the Asian region was relatively low, with a substantial portion of the funds being reinvested in the Euro-currency market. However, as the Asian dollar deposit rates dropped to about 5 to 6 per cent in early 1971, there was a significant increase in the proportion of Asian dollar deposits being lent to borrowers in the Asian region.[2/] The market thus began to achieve one of the basic objectives of its promoters, *viz.*, to finance economic activity within, rather than outside, the Asian region.

III. Sources of Funds and the Rate of Growth of the Market

A. Sources of Funds

The suppliers of funds to the Asian dollar market can be grouped into four categories: commercial banks; central banks; non-bank companies;

1/ S.A. Pandit, "The Asian Dollar and Free Gold Markets in Singapore," *Finance and Development*, International Monetary Fund and World Bank, Washington, D.C., June 1971, p. 34.
2/ *Ibid.*, p. 34.

and individuals residing outside of Singapore.[1/] The commercial banks are those located outside of Singapore including the head offices and other branches of the foreign branch banks in Singapore. These are located primarily in the Pacific region, Europe and the United States. The volume of funds supplied by foreign central banks (as well as some governmental statutory bodies) is thought to be relatively small.[2/] The more important suppliers of funds among the non-bank companies are the large multinational[3/] and regional corporations in the Pacific area that often have a substantial amount of funds that can be invested for a short period of time. Among the more important non-resident individuals with offshore funds in the Asian region are reportedly the overseas Chinese.

It has been reported that about 30 per cent of the Asian dollar funds are obtained from the last two categories of non-bank lenders, especially the multinational and regional corporations.[4/] The remaining 70 per cent is supplied by interbank deposits, both from other banks in Singapore and from banks outside of Singapore. The share of interbank deposits in the total increased in the early 1970's, particularly during 1971-73, partly because regional loan demand grew faster than the rise in nonbank deposit sources.

1/ Far Eastern Economic Review, Hong Kong, September 17, 1973, p. 41.
2/ "The Singapore Asian Dollar Market," World Financial Markets, op. cit., p. 11.
3/ In the past, funds were also supplied to the market by large American multinational companies under so-called "swapping arrangements." The head office of the multinational arranges to deposit a specific sum in an ACU bank, with this amount, in turn, being borrowed by the Singapore office of the multinational. This procedure was mainly utilized during the early 1970's when U.S. controls on foreign capital investment were in force. Since the removal of these controls in late January 1974, the utilization of "swapping arrangements" has decreased greatly.
4/ Ibid., p. 11.

During the early years of the Asian dollar market a high proportion of the funds supplied to the market tended to come from outside the Asian area. However, some funds were obtained from Hong Kong, the Phillippines, Indonesia and Taiwan.[1/] These were mainly funds that would have been placed in the Euro-dollar market had there been no Asian dollar market. Around the middle of 1972, Singapore also began to receive funds from Australia, Latin America and occasionally from Europe. By the end of 1972, about half of the market's funds were being obtained from the Asian area (including Japan and Thailand) and the other half from elsewhere. During 1973 the proportion of funds obtained from Asia and Australia increased further.

The maturity structure of ACU bank liabilities indicates that it is mainly a short-term market. About 80 per cent of the liabilities fall in the 8-day to one-year range, with less than 15 per cent of the liabilities having a maturity of more than one year.

B. The Rate of Growth of the Market.

Measured in terms of the total assets of the ACU banks, the Asian dollar market has grown at a very rapid -- but decelerating -- rate since its establishment. Starting from a low base at the end of 1968, assets rose about 300 per cent in 1969 and about 215 per cent in 1970. By 1973 the annual rate of growth had declined to about 110 per cent and it fell further in 1974 to about 65 per cent.

1/ Wong Nang Jang, "The Growth of the Asian Dollar Market," Singapore Survey, Euromoney, London, September 1972, p. 15.

Despite the deceleration, the rate of growth in the market has been impressive, with total assets/liabilities increasing from approximately $400 million at the end of 1970 to about $10 billion at the end of 1974. Statements made by bankers in the early 1970's about the future growth of the market underestimated the actual rate of growth in the market. Data on the total assets/liabilities outstanding of the Asian Currency Units are provided in Table 2.

Table 2. Total Assets/Liabilities of Asian Currency Units
(In millions of U.S. dollars)

End of Period	
1968	31
1969	123
1970	390
1971	1,063
Mar. 1972	1,284
June 1972	1,619
Sept. 1972	2,260
Dec. 1972	2,976
Mar. 1973	3,539
June 1973	3,827
Sept. 1973	4,913
Dec. 1973	6,277
Mar. 1974	7,192
June 1974	8,112
Septe. 1974	9,297
Dec. 1974	10,357
Mar. 1975	10,930
June 1975	11,016

Note: Total liabilities include "Deposits of Non-banks", "Interbank Funds," and a relatively small amount of "Other Liabilities".
Source: Quarterly Bulletin, Monetary Authority of Singapore, 4th Quarter, 1974, Singapore, p. 31 and Far Eastern Economic Review, Hong Kong, September 26, 1975, p. 38.

These data tend to exaggerate somewhat the actual size of the market. One reason for this is that as new bank branches are established in Singapore, some of the Asian loans that had been made earlier are transferred from the accounts of the head office or European branch to the new Singapore branch. Such loans do not represent "new" business. Another aspect is that the data include interbank transactions which probably involve some double counting of actual market transactions.1/ Although various estimates have been made of the actual size of the market,2/ it would be quite difficult to measure this precisely.

An interesting question is: how rapidly will the market grow in the future? So far the growth path has been one of deceleration, as is probably the case with any financial market growing from a small size. More specific figures are provided in Table 3 below, indicating the generally decreasing rate of growth since 1969.

Table 3. Per cent Increase in Assets/Liabilities of Asian Currency Units
(End of period, as compared with a year earlier)

1969	1970	1971	1972	1973	1974	1975 (June)
303	217	173	180	111	65	36

Source: Same as in Table 2.

Data for 1975 indicate that the growth of the market has slowed sharply, as compared with previous years, and that there is, at present, a

1/ Dick Wilson, "Banking and Currencies: Asian Dollars and Others," Asia 1973 Yearbook, Far Eastern Economic Review, Hong Kong, 1972, p. 67.
2/ Dick Wilson, in the article cited in the previous footnote, indicates that the aggregate data may overstate the actual size of the market by a quarter to a third. Ibid., p. 67.

tendency for the market to consolidate its gains. The slowing in the rate of growth partly reflects the world-wide recessionary conditions prevailing in 1975, as well as the increased caution that the Asian dollar banks are now exercising in granting credits.[1] Only moderate rates of growth are now anticipated for the balance of 1975 and early 1976.[2] The past growth trend of the market is shown in Chart 2.

IV. Uses of Funds and Related Matters

A. Borrowers, Terms and the Interbank Market

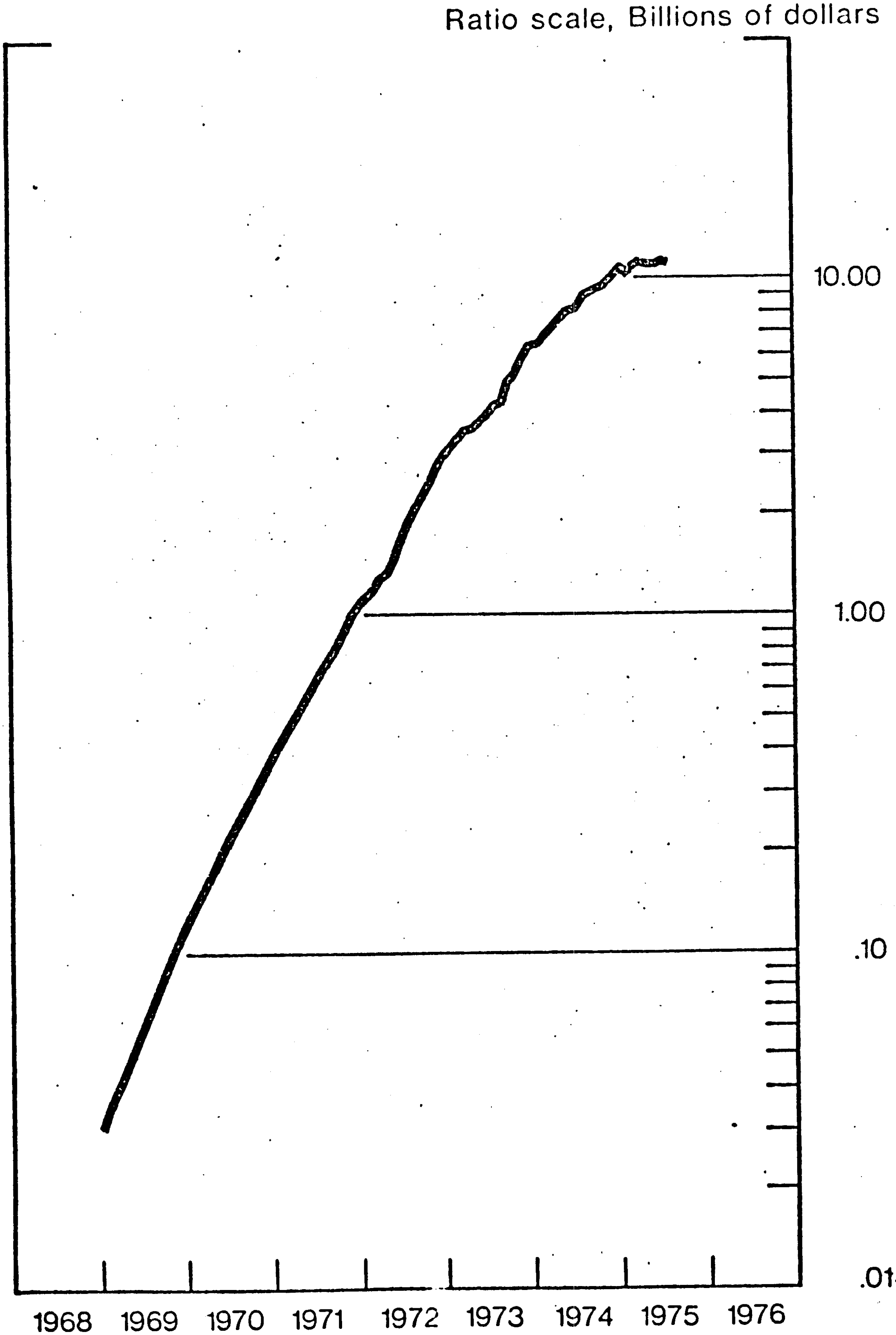
The bulk of the borrowers from the Asian dollar market are located in the geographical area stretching from Japan around the perimeter of East Asia to the Indian subcontinent. It is estimated that approximately two-thirds of the credits provided by the market are now extended to customers in the Asian area. These mainly include borrowers in Japan, Hong Kong, Indonesia, the Philippines and Australia.

A high proportion of the demand for Asian dollars is from banks, international corporations, major national companies, and, to some extent, small enterprises. Asian dollar lending is largely a function of prime names, where first class credit standing is required. Asian dollar loans are most likely to be extended to multinational firms with a parent company willing to guarantee such loans, to borrowers engaged in export and

1/ See Michael Wong Pakshong, "The Asian Dollar Market Now," Euromoney, London, June 1975, p. 102.
2/ See "Asia Dollar Market: Short-term Outlook is Consolidation," Far Eastern Economic Review, Hong Kong, September 26, 1976, p. 38.

CHART 2

Total Assets/Liabilities of Asian Currency Units



other transactions that provide them with guaranteed access to foreign exchange, to borrowers that are domiciled in countries where relatively free convertibility and movement of funds is permitted, and to firms which have obtained special approval from their exchange control authorities to purchase enough foreign exchange to meet their loan repayment obligations.

The loans and investments made by ACU banks are subject to certain restrictions. For example, foreign currency loans extended by ACU banks to local banks in Singapore are limited to those banks authorized to deal in foreign exchange and to other ACU banks. In the case of investment or loans in local currency extended through a local bank to residents of Singapore with the approval of the monetary authorities, such credits can be extended only for a term of not less than one year, or for industrial financing or investment only, i.e., mainly for financing the import of machinery or other capital goods.1/

With regard to the lending operations of the ACU banks, it has been reported that the multinational U.S. banks have an edge over the other ACU banks because of their extensive branch network in Asia. With a large clientele of multinational corporations that maintain relations with the banks' head offices, these U.S. banks have been able to build up a substantial loan base that is helpful in expanding their activities in the Asian area.2/

1/ Roberto Y. Garcia, "The Asian Dollar Market," Central Bank News Digest, Central Bank of the Philippines, Manila, July 20, 1971, p. 4.
2/ Wong Nang Jan, "The Growth of the Asian Dollar Market," op. cit., p. 16.

As indicated by Table 4 below, direct loans by the ACU banks to non-banks constitute only about one-fourth of the banks' total assets. However, the proportion of direct and indirect loans to non-bank borrowers in the Asian dollar market is undoubtedly considerably higher since a substantial portion of the funds obtained through interbank transactions are eventually channeled to such borrowers. Some of the large American banks in Singapore, for example, use their Asian dollar funds to extend loans to companies and individuals through their branches in the Asian region.

Table 4. Singapore: Total Assets of the ACU Banks
(In millions of U.S. dollars)

End of Period	Loans to Non-banks	Interbank Funds: Total	Interbank Funds: In Singapore	Interbank Funds: Outside Singapore 1/	Other Assets	Total Assets
1968	1	29	n.a.	n.a.	-	30
1969	1	120	n.a.	n.a.	2	123
1970	14	370	13	357	5	390
1971	18[illegible]	851	39	812	23	1,063
1972	601	2,331	99	2,232	44	2,976
1973	1,214	4,962	262	4,700	101	6,277
1974	2,629	7,528	223	7,305	200	10,357
June 1975	3,246	7,586	251	7,335	184	11,016

1/ Including inter-ACU transactions.
Source: Quarterly Bulletin, Monetary Authority of Singapore, Singapore, 2nd Quarter, 1975 p. 31. Totals may not equal sum of components due to rounding.

With regard to credit terms, the Asian dollar market is primarly a short-term market. The assets of the ACU banks with a maturity of more than one year constituted only 7 per cent of the banks' total assets at the end of 1974. (See Table 5 below.) On the other hand, assets with maturities of eight days to three months accounted for 37 per cent of total assets at the end of 1974, while those with maturities of over three months up to 12 months comprised 45 per cent. By mid-1975, however, the proportion of assets with a maturity of more than one year had increased substantially to nearly 13 per cent.

Table 5. Assets of Asian Currency Units, by Original Maturities
(In millions of U.S. dollars)

End of Period	Total 1/	Up to 7 Days	Over 7 Days to 3 Months	Over 3 to 12 Months	More Than One Year
1970	384	197	77	106	4
1971	1,040	165	361	416	98
1972	2,932	374	1,072	1,234	251
1973	6,176	662	2,120	3,096	298
1974	10,157	1,032	3,795	4,595	735
June 1975	10,833	787	3,722	4,924	1,400

Note: Data may not total due to rounding.
1/ Total assets include only balances and fixed deposits with banks, and loans and advances to banks and non-banks. Foreign notes and coins, treasury bills, public securities and other securities, fixed assets and all other assets held by ACU banks are excluded.
Source: Quarterly Bulletin, Monetary Authority of Singapore, Singapore 2nd Quarter, 1975, p. 32.

Various reports indicate that more medium-term credits are likely to be extended as the Asian dollar market develops further, especially to the petroleum and public utility industries. With the entry into the Asian dollar market in recent years of the merchant banks, more medium- and long-term credits are likely to materialize since these banks specialize in such credits.

A comparison of the maturity structure in the Asian dollar market with that for a major component of the Euro-currency market indicates that there are substantial differences at the short- and longer-end of the market. For example, data on the claims of banks and certain other institutions in the United Kingdom in foreign currencies as of November 29, 1974,[1/] indicate that claims with a maturity of less than 8 days were 17 per cent of total claims as compared with 10 per cent for the claims with the same maturity for the ACU banks in Singapore. For the next maturity range of 8 days to 3 months, the proportions were roughly similar at 41 and 37 per cent, respectively. But for 3 months to a year, the proportion for the United Kingdom was 21 per cent and 45 per cent for Singapore, while for maturities of a year or more, the proportions were 21 and 7 per cent, respectively.

A fairly wide variety of loan facilities are provided by the ACU banks. These include: (1) short-term credits; (2) straight fixed loans of predetermined length for up to one year; and (3) lines of credit where a maximum amount can be advanced against notes within an agreed period (normally for 90 to 180 days), but renewable within the ceiling after repayment, with a commitment fee being charged for the unused portion of the facility. Roll-over loans are also provided wherein the maturity is fixed (usually for two to five years), but the interest rate is adjusted every three to six months at an agreed margin over SIBO. This "floating" rate technique for roll-over loans was reportedly patterned after a similar method used in London and was introduced by one of the major ACU banks operating in the Asian dollar market.

1/ See Quarterly Bulletin, Bank of England, London, September 1975, Table 22.

As indicated earlier, corporate borrowers in the Asian dollar market are charged interest rates ranging from 0.75 to as much as 3.0 percentage points over the SIBO rate, depending on the bank's assessment of the credit risk involved. Although this range narrowed somewhat in 1974, it subsequently returned in 1975 to approximately the range indicated.

A relatively high proportion of the funds borrowed in the Asian dollar market are used directly for investment (including ship construction), for financing the importation of capital goods, and for working capital requirements.1/ Of much less importance is the direct financing of trade, particularly for noncapital goods. This is in contrast with the Euro-dollar market where a substantial portion of export and import bills are financed with Euro-dollar funds.

A very important part of the Asian dollar system is an active interbank market in Asian dollars. This market was reportedly inaugurated in July 1970 by one of the leading ACU banks.2/ The market is attended by brokers who serve as a kind of clearing house. They match borrowers with lenders, but take no part in the deals as principals. At present, all ACU banks operate in the interbank market. As indicated by the data in Table 1, the brokers' commission is normally one-eight per cent -- the same as in London.

B. Syndicated Loans and Bond Issues

Although specific reports are lacking, syndicatedloans have reportedly become in recent years a more important feature of the Asian

1/ S. Venu, "A Note on the Asian Dollar Market," Bankers' Magazine, London September 1973, p. 117.
2/ For a list of the foreign banks participating in the interbank market, see Wong Hang Jang, op. cit., p. 15.

dollar market.[1/] With the various maturities on these loans ranging from 3 to 10 years, syndicated loan operations have helped to extend somewhat the short-term nature of the market into the medium- and long-term range. However, as indicated earlier, the market is still primarily a market in short-term funds.

The first Asian-dollar syndicated loan by banks operating in Asia was extended to the Private Investment Corporation of Asia (PICA) in December 1971. The loan was for $10 million, with a four-year maturity, at an interest rate three-fourths of a percentage point over the six-month Singapore interbank offered rate, but on a three-to-six-month roll-over basis To allay any concern on the part of the borrower that the interest rate in the Asian dollar market might not be competitive, the rate for the PICA loan was based on the rates of six reference banks -- three in London and three in Singapore. The rates were determined by averaging the interbank rates of the three Singapore banks, except when the average rate quoted by the three London reference banks was more than one-fourth percentage point below the Singapore interbank offered rate. In general, however, the Asian dollar rates have remained very close to the Euro-dollar rates in London.[2/]

The loan syndicate included 15 banks and was headed by the Bank of America. Three Singapore banks participated (Development Bank of Singapore, the Oversea-Chinese Banking Corporation and the United Overseas Bank) and they provided 15 per cent of the credit. The funds were used by PICA for short- and medium-term financing of businesses in the Asian area. Since

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1/ Dick Wilson, "Southeast Asia's Banking Boom," The Banker, London, March 1975, p. 255.
2/ "The Singapore Asian Dollar Market," World Financial Markets, op. cit., p. 12.

its establishment, PICA has financed investments in at least seven Asian countries in such industries as textiles, glass, steel, chemicals, hotels, food processing and construction. The PICA loan was something of a milestone in that it marked the fist time a private Asian-oriented investment organization had obtained a medium-term investment credit from a syndicate of financial institutions operating in Asian capital markets.

Other publicly-announced syndicated bank credits have included loans to enterprises in Brunei and Indonesia. In May 1972, a $27.5 million, seven-year syndicated loan was extended to Brunei LNG, a joint venture organized for the expoloration and production of natural gas in Brunei by the Brunei Government, the Royal Dutch Shell group and Japan's Mitsubishi Corporation. The floating interest rate on the loan was set 1 percentage point above the six-month Euro-dollar deposit rate. In 1972 a syndicated bank loan for 40 million was also extended to an Indonesian oil enterprise for a term of five years, the interest rate being based on the six-month Asian dollar deposit rate and revised every six months.

In contrast with the syndicated loan operations, which appear to be taking hold fairly well,1/ the Asian dollar bond market has been disappointingly slow in developing. So far there have been five publicly-announced issues since the Asian dollar market began to operate, but the secondary market in these bonds is still relatively undeveloped.

The first Asian dollar bond was issued by the Development Bank of Singapore in December 1971. Guaranteed by the Government of Singapore (which owns about 49 per cent of the Bank's shares), the $10 million, 10-year bond was issued at par with a coupon rate of 8-1/2 per cent. The

1/ Precise measurement is difficult since, unlike public bond issues, not all syndicated loans are publicly announced.

issue was underwritten by financial institutions located in Asia, Europe and America, and Daiwa Securities of Japan served as the lead manager. Although the issue is quoted on the Singapore stock exchange, an active secondary market in the issue has not developed.[1/] The proceeds of the issue have been used by the Bank for financing medium- and long-term capital expenditures in Singapore.

The second Asian dollar bond issue was floated in October 1972, when the Government of Singapore issued a 7-3/4 per cent, 15-year bond, in the amount of $20 million. The managing syndicate included the Daiwa Securities Company of Japan, the Development Bank of Singapore, and four others. Early in 1973 a third bond issue took place when the United Overseas Bank of Singapore issued a $30 million convertible bond. The fourth bond was issued in December 1973 when Orient Leasing (Caribbean) N.V. issued at par an 8-3/4 per cent, 9 year and one-month, $10 million bond. This issue, however, was a private placement and was sponsored by a syndicate of Japanese securities firms and banks, led by Daiwa Securities. The fifth bond was issued in July 1975 by Keppel Shipyard Ltd., a government-financed shipbuilder in Singapore. The $12 million, 7-year issue carried a coupon rate of 9.5 per cent and was guaranteed by the Government of Singapore. The underwriting syndicate, headed by Daiwa Securities Company of Japan, offered the bonds for public subscription mainly to Arab and Asian investors.

1/ Euromoney, London, March 1972, p. 56.

C. The Shift Away from Net Lender to Europe

During the Asian dollar market's early years from 1969 to about mid-1971, the market was basically a net lender of funds to Europe. This occurred because the supply of funds to the market exceeded attractive and bankable outlets for these funds in the Asian Area, with the result that most of the surplus was invested in Europe. Much of this rechanneling of funds was out of sheer necessity in order to earn an immediate return on the funds deposited.

Beginning around mid-1971, however, the market shifted away from being a net lender to Europe and became instead a channel for loanable funds from Europe and other areas to the Asian region.1/ Several factors contributed to this shift. One of these was that many of the banks active in the Asian dollar during its early years had not had much experience with potential borrowers in the Asian region. As time passed, however, these banks became more familiar with the region and the various lending opportunities. In addition, possible Asian borrowers from the market became more aware of the market's potentialities. Also, during 1969-70 the interest rates in the Asian dollar market were relatively high, often exceeding the domestic commercial rates in many of the Asian countries, but in 1971 the rates declined substantially to levels that frequently made the Asian dollar market a cheaper source of funds.

With the increase in the volume of lending to Asian borrowers, the Asian dollar market since the latter half of 1971 has generally been a net borrower from outside the Asian region, rather than a net lender.

1/ World Financial Markets, Morgan Guaranty Trust Company, New York, March 1973, p. 11; and Euromoney, London, November 1971, p. 52.

V. Some Concluding Observations

Any assessment of the Asian dollar market's strengths and contributions, would have to conclude that the continued growth of the market -- averaging nearly 150 per cent per year during 1970-74 -- is strong testimony to the market's viability. In the early 1970's virtually all prognosticators of the market tended to underestimate the growth of the market. While still relatively small compared with the European-based Euro-currency market, there is little doubt that its rate of growth has been impressive. Despite the general deceleration in the rate of growth of the market in the 1970's, it appears likely that by the end of the decade, the market will have reached a substantial size. The market has made a significant contribution to the economic prosperity of Singapore and to various parts of the Asian region. Most important have been the benefits to the area from a new and expanding source of development finance. In addition, the market has helped to generate new commercial and financial activities in Singapore1/ as well as to create new jobs and improve the expertise in the banking and financial sector. The market may also have induced some trading and investment institutions to establish their regional headquarters in Singapore.

The performance of the market since its establishment has fulfilled, to a very considerable degree, the expectations of its original promoters. The market continues to have all of the strengths or advantages cited in the first section of this paper, as well as those provided by the various actions

1/ One report indicates that the presence of the Asian dollar market provided the impetus for the establishment of two investment banks in Singapore, See Kees van Dongen, "The Asian Dollar Market," Central Bank News Digest, Central Bank of the Philippines, Manila, August 31, 1971, pp. 2-4.

of the Singapore Government. The market is now well on its way toward becoming a permanent feature of the area, as evidenced by the major commitment in funds, facilities and personnel that a large number of leading international banks have made to the market.

This is not to say, however, that the market does not have any weaknesses or deficiencies. These do exist and some of the more important might be cited. One is that the Asian dollar capital market still remains relatively underdeveloped. A substantial portion of the Asian dollar debt issues have been subscribed from outside Singapore, with only limited interest being shown by Singapore-based institutions. This situation has its parallel in the domestic economy of Singapore where the market for fixed-interest debt issues is also relatively underdeveloped. Considering Singapore's stage of development, however, one could not realistically expect a high proportion of the Asian dollar debt issues to be purchased by Singapore-based institutions.

Another deficiency is that Singapore's foreign exchange market is also relatively underdeveloped. Over 60 per cent of the exchange transactions in Singapore do not involve the Singapore dollar, and London more or less disregards Singapore as far as exchange quotations are concerned. Although the Australian banks use Singapore heavily for balancing their foreign exchange positions, the volume is not large, and the importance attached to the Australian operations is an indirect indication of how small the Singapore market is.[1/]

1/ Andrew Cartwright, "Singapore 1974 Focus: Financial Center, A Future Based on Regionalism," Far Eastern Economic Review, Hong Kong, August 9, 1974, p. 14.

Another weakness -- at least in the short-run -- is that so many new financial institutions have set up operations in Singapore in recent years, that the city-state is now considered by many to be overbanked. One result of this has been rate cutting to the point where many spreads between deposit and lending rates in 1973 and early 1974 were quite unrealistic.1/

Two other deficiencies of Singapore, at least as compared with Hong Kong, relate to taxes and exchange controls. Singapore continues to impose a 10 per cent tax on the profits derived by the ACU banks from their offshore lending to non-bank clients outside Singapore (or to those approved non-bank borrowers residing in Singapore), whereas Hong Kong does not tax the income generated outside the colony by its resident companies upon remittance to the Colony.2/ In addition, Singapore still retains the use of the sterling area list of "scheduled territories" for exchange control purposes, while the United Kingdom since June 23, 1972, has not included Hong Kong in its list of "scheduled territories". This means that many transactions which the Singapore authorities limit through exchange control can be carried out if "washed" through Hong Kong, which is part of Singapore's "scheduled territories," since there is complete freedom of movement between Singapore and Hong Kong.

This partial list of the market's weakness and deficiencies is not meant to detract from the generally promising outlook for the market in the future. One can reasonably expect by the late 1970's that the Asian dollar

1/ Andrew Cartwright, Ibid.
2/ Mark Borsuk, "The Future Development of Offshore Capital Markets in Asia," Columbia Journal of World Business, Columbia University, New York, Spring 1974, p. 51.

market will constitute a not insignificant part of the total Eurocurrency market. While Singapore may not yet be in the first league of international finance, there can be little doubt that Singapore is now an important banking and international financial center.

It should be noted, however, that the foreign banks in Singapore constitute the major dynamic element in the banking structure. The future growth of Singapore as a financial center will depend critically on how successful these institutions will be in achieving their basic goals. Many of these new institutions may be disappointed if they plan to rely on the Asian dollar market as their main bread and butter operation, but few are probably suffering from this illusion. The main justification for the influx of new foreign banks is really the business that they hope to generate in the future.

In view of the developments to date, Singapore's future role as an important regional financial center seems assured. The main foreseeable threat to this position would be if Japan and/or Hong Kong were to make major changes in their financial systems -- creating an international money market more attractive than that in Singapore. But, at present, this seems unlikely in view of the past public statements of the governmental authorities in Japan and Hong Kong. Even if this were to occur, however, it is likely that because of the past substantial rate of growth in the Singapore market, that Singapore will continue to retain a significant share of the available Asian dollar business in the region.

Appendix A. Measures Taken by Singapore to Promote the ADM

August 1968. The Singapore Government revised its local income tax law and eliminated the 10 per cent withholding tax on interest income from deposits held by non-residents. Hong Kong, which has continued to retain its 15 per cent withholding tax on such deposits, has not been able to develop its own system of Asian dollar accounts, but has, instead, re-channeled Asian-dollar-type funds to the Singapore market.

1969. In a move to further improve the freedom of operations in the Asian dollar market, the Singapore Government exempted such transactions from "reference to the exchange control authority."1/ This relieved the Asian dollar banks in Singapore of the requirement to obtain approval from, or file reports with, the Singapore exchange control authorities. However, while the Asian dollar banks are allowed to lend to companies or individuals outside the scheduled teritories without prior approval from the authorities, the banks are required to obtain the approval of the exchange control authorities in the country concerned for loans to borrowers residing in the scheduled territories.2/

April 1970. The Government authorized the Asian dollar banks to issue certificates of deposit denominated in U.S. dollars and to deal in such certificates among themselves.

1/ The Asian Dollar, Singapore International Merchant Bankers Limited, Singapore, January 1973, p. 6.
2/ For a more detailed description of Singapore's exchange controls over Specified Currencies and Scheduled Territory Currencies, see The Asian Dollar Market, First National City Bank, Singapore, January 1975, pp. 8-11.

May 1971. Prior to May 1971, Asian dollar loans could not be made to Singapore residents, but beginning in May 1971 the Government eased this restriction by allowing Asian dollar loans to be made to export-oriented, hard-currency-earning corporations in Singapore.1/

January 1972. In a move to make the Asian dollar banks more competitive in their operations vis-á-vis the Euro-currency banks in Europe and to increase their capacity to expand credit, the Singapore Government abolished the 20 per cent minimum liquidity ratio that the banks had to maintain against their foreign currency deposit liabilities. (Singapore banks, however, were still required to maintain a reserve in liquid assets of not less than 20 per cent against their domestic currency deposit liabilities.) In addition, foreign branch banks were required to maintain a 9 per cent reserve against their net foreign liabilities in the interbank market;2/ however; this requirement was subsequently reduced and abolished altogether in March 1974.

March 1972. The Government eliminated the stamp duty of 1/10 of one per cent of the face value of negotiable certificates of deposit and bills of exchange. A few banks had been issuing NCD's and this move was prompted mainly by the desire to stimulate further the growth of a secondary market in deposit instruments.

April 1972. There was a further relaxation of the separation of Singapore's domestic financial market from the Asian dollar market when

1/ The date of May 1971 is an approximation. The relaxation may have occurred earlier. See the Asian Dollar Market, First National City Bank, Singapore, May 1971, p. 8.
2/ "Asian Dollar Market," International Currency Review, London, May/June 1973, p. 20.

the Government authorized the Asian dollar banks to make foreign-currency loans to locally incorporated firms -- whether owned by residents or non-residents -- against export orders or letters of credit.

May 1972. The Government informed the Asian dollar banks that it would approve, on a case-by-case basis, applications by resident companies (mostly approved multinational companies) to hold deposits in Asian Currency Units[1/] and to borrow from the Asian dollar banks for purposes other than export financing, under certain specified conditions. In general, the conditions were that the funds to be deposited must arise from earnings repatriated from abroad or in amounts equal to export earnings that they had received. Previously, foreign exchange earnings had to be converted immediately into Singapore dollars.

June 1972. The separation of the domestic financial market from the Asian dollar market was further relaxed when the Government authorized local insurance companies and certain government-approved provident and pension funds to invest up to 10 per cent of their funds in the Asian dollar market or in Asian dollar bonds.

August 1972. In the late summer of 1972 the Asian dollar market was further strengthened by the entry into the Singapore market of two international money brokers from London.[2/] These brokers maintain direct telex and

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1/ As indicated in Section II. A of this paper, an "Asian Currency Unit" (or ACU) is the formal name used by the Singapore authorities for the convertible foreign currency deposit accounts maintained by the Asian dollar banks. Banks maintaining these accounts will be referred to as ACU banks. The foreign currency deposits maintained in these accounts are generally denoted by the currency in question, such as Swiss francs or yen, rather than -- for example -- Asian yen.

2/ These were M.W. Marshall and Co., and P. Murray-Jones. See Lee I. Niedringhaus III, "How the Asian Currency Unit System Works," Euromoney, London, May 1973, page 75. A third money broker, Charles Fulton and Company, also began operations in Singapore in March 1973. By late 1975, Singapore reportedly had a total of nine international money brokers, five of which were affiliated with foreign firms. See World Financial Markets, Morgan Guaranty Trust Company, New York, September 1975, p. 7.

telephone communication with London during those working hours when the two markets overlap each other. They assist the Singapore banks in their foreign exchange and international deposit operations, and make it possible for a Singapore bank to get current quotations from London without having to make its own telephone or telex contact.

March 1973. The number of participating banks in the Asian dollar market was expanded when the authorities granted licenses to six new foreign banks to establish branch operations in Singapore. However, these licenses to conduct a banking business were more restrictive than in the past. Foreign banks that had established branches in Singapore by February 1964 have been accorded full equality with local banks to engage in whatever business they saw fit. During 1965-69 there was a hiatus, as the authorities generally declined to license the establishment of new foreign branch banks, but during 1970-72 there was a "second wave" of foreign bank entry into the Singapore market. Although the authorities granted to these banks "restricted licenses", the main restrictions were that these banks were precluded from accepting Singapore dollar time deposits from the public in amounts less than S.$250,000 and from offering saving account facilities -- restrictions that did not interfere with the banks' ACU business.

Early in 1973, however, the authorities adopted a somewhat novel approach to allow in a new "third wave" of foreign banks, but at the same time to provide certain safeguards for the domestic retail market which was considered by many to be overbanked. The new banks, which are usually referred to as "offshore banks," were informed by the authorities that they should confine their activities almost entirely to operations in the Asian dollar market with one exception. This was that they could extend Singapore dollar loans (and thus maintain the related current account facilities), provided these loans filled a gap in the existing system of credits and services to local industry. In general, such loans could be made if they were funded from the interbank market, were for at least S.$1 million, and carried a medium- to long-term maturity. The new banks, however, would not be allowed to open additional branches in Singapore. This move to allow in a "third wave" of banks had the effect of giving the Asian dollar market a much wider scope and depth of operation.

July 1973. Three actions were taken by the authorities which had the effect of increasing the potential supply of funds to the Asian dollar market from Singapore residents. Individual Singapore residents were allowed to hold up to S.$100,000 equivalent, in ACU deposits, while corporations were allowed to hold up to S.$3 million equivalent, both without prior approval from the authorities. In addition, approved unit trusts, mutual funds and investment trusts were allowed to hold up to S.$5 million in ACU deposits so long as the amount held is not in excess of 15 per cent of the institution's funds.

August 1973. Nonresidents were exempted from the requirement to pay a tax on the interest received from Asian dollar bonds[1/] issued in Singapore. In addition, the Government reduced from 40 per cent to 10 per cent the corporate income tax on ACU bank interest receipts arising from foreign-currency loans to non-bank offshore customers.

September 1973. To improve further the attractiveness of Asian dollar bonds, the Government waived until further notice the stamp duty on Asian dollar bond certificates.

1/ Asian dollar bonds have, to date, been denominated in U.S. dollars.

Appendix B. Singapore Banking Institutions
(As of December 31, 1974)

A. ACU Banks

1. Local Banks
   - Lee Wah Bank, Ltd. (1920)[1/]
   - Oversea-Chinese Banking Corporation, Ltd. (1932)
   - United Overseas Bank, Ltd. (1935)
   - Overseas Union Bank, Ltd. (1947)
   - Development Bank of Singapore (1968)

2. Foreign Branch Banks with Complete License
   - Chartered Bank (1859)
   - Hongkong and Shanghai Banking Corp. (1877)
   - Alegemene Bank Nederland, N.V. (1883)
   - First National City Bank (1902)
   - Banque de l'Indochine (1905)
   - Bank of East Asia (1953)
   - Bank of Canton (1953)
   - Bank of America (1955)
   - Bank of Tokyo, Ltd. (1957)
   - Bangkok Bank, Ltd. (1957)
   - Mitsui Bank, Ltd. (1963)
   - Chase Manhattan Bank (1964)
   - First National Bank of Chicago (1970)

3. Foreign Banks with Restricted License
   - Moscow Narodny Bank (1971)
   - Banca Commerciale Italiana (1971)
   - Asien Pazifik Bank (1971)
   - Habib Bank (1971)
   - Dresdner Bank (1971)
   - European Asian Bank (1972)
   - American Express International Banking Corp. (1972)
   - Credit Suisse (1973)
   - Sumitomo Bank (1973)
   - Korea Exchange Bank (1973)
   - Mitsubishi Bank (1973)

4. Offshore Banks
   - Bankers Trust Company
   - Barclays Bank International
   - Continental Illinois National Bank and Trust Company of Chicago

1/ The year that is listed after each bank indicates when it began to operate in Singapore.

First National Bank in Dallas
Marine Midland Bank
Toronto Dominion Bank
National Westminister Bank
Republic National Bank of Dallas
Fuji Bank limited
Lloyds Bank International Ltd.
Bank of Montreal

5. <u>Merchant Banks</u>

	Shareholders
Asia Pacific Capital Corporation	First Natinal City Bank (70%) Fuji Bank (30%)
Asian and Euro-American Merchant Bank	Bank of America (30%) Overseas Union Bank (15%) Banque de Paris et des Pays Bas (11%) Dai-Ichi Kangyo Bank (11%) Dresdner Bank (11%) Kleinwort, Benson (11%) Union Bank of Switzer-land (11%)
DBS-Daiwa Securities International Ltd.	Development Bank of (Singapore (50%) Daiwa Securities (40%) Sumitomo Bank (10%)
Dresdner (SEA) Ltd.	Dresdner Bank (100%)
First Chicago(S) Merchant Bank Pte. Ytd.	-----
Haw Par Merchant Bankers	Haw Par Brothers International (100%)
Morgan Guaranty and Partners	Morgan Guaranty International Finance Corp (40%) Development Bank of Singapore (35%) Morgan Grenfell (5%) Australian United Corp. (5%) Bank Mees and Hope (5%) Industrial Bank of Japan (10%)
PICA (Private) Limited	-----

Singapore-Japan Merchant Bank	Oversea-Chinese Banking Corp. (28%) Singapore International Bankers Limited (24%) Bank of Tokyo (24%) Yamaichi Securities (24%)
Singapore International Merchant Bankers	Oversea-Chinese Banking Corp (42.1%) Continental Illinois National Bank of of Chicago (23.7%) Crown Agents (23.7%) Yong Pung How (5.3%) Alexander Discounts (5.2%)
Singapore Nomura Merchant Banking Ltd.	Development Bank of Singapore (35%) Nomura Securities (30%) Sanwa Bank (20%) J. Ballas (15%)
United Chase Merchant Bankers Ltd.	Chase Manhattan Bank (42.5%) United Overseas Bank (42.5%) Nikko Securities (15%)
William Braadt's Limited	William Brandt's (100%)

B. Non-Acu Banks

1. Local Banks
   - Four Seas Communications Bank, Ltd. (1906)
   - Chung Khiaw Bank, Ltd. (1947)
   - Industrial and Commercial Bank, Ltd. (1953)
   - Bank of Singapore, Ltd. (1954)
   - Far Eastern Bank, Ltd. (1958)
   - Asia Commercial Banking Corp., Ltd. (1959)

2. Foreign Branch Banks with Complete License
   - Mercantile Bank, Ltd. (1856)
   - Kwong Lee Bank, Ltd. (1934)
   - Ban Hin Lee Bank, Ltd. (1935)
   - Bank of China (1936)
   - Indian Overseas Bank, Ltd. (1937)

Kwangtung Provincial Bank (1939)
Indian Bank, Ltd. (1941)
United Commercial Bank, Ltd. (1948)
Bank of India, Ltd. (1951)
Bank Negara Indonesia (1955-63, 1966)
United Malayan Banking Corp., Ltd. (1959)
Malayan Banking, Ltd. (1960)
Tat Lee Bank Ltd. (1974)

3. Merchant Banks

Associated Merchant Bank	Cycle and Carriage (51%) Associated Securities (40%) Royal Bank of Scotland (9%)
Chartered Merchant Bankers	Chartered Bank (51%) Arbuthnot Latham (39%) Sime Darby Investment (10%)
Citicorp Financial Limited	First National City Bank (100%)
Jardine Fleming (SEA)	Jardine Fleming (100%)
Lewis and Peat Merchant Bankers	Guiness Mahon (70%) Shing Kwan (30%)
New Court Merchant Bankers	Sime Darby (40%) N.M. Rothschild and Sons (40%) Rothschild Intercontinental Bank (15%) Pierson, Heldring & Pierson (5%)
Temenggong Merchant Bankers	Temenggong Securities (100%)

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