PROPERTY TRUST FUNDS IN SINGAPORE:
PROSPECTS AND POSSIBILITIES

by

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SEP 16 1996
ABSTRACT

This thesis investigates the prospects and possibilities of establishing property trust funds in Singapore. As the next evolutionary step in Singapore's financial markets, the future establishment of property trusts here would have significant impact on both the local real estate and capital markets. These funds are already active in USA, UK, Australia and Malaysia, and look set to play an increasingly important role in the Asia Pacific region as an alternative investment vehicle for investors and as a new capital source for developers.

At present, the development and features of Real Estate Investment Trusts (REITs), particularly equity REITs in the United States, are recognized by most unit trust fund managers and real estate consultants in Singapore. However, the usefulness and applicability of REITs to the local real estate context is yet to be fully realized by the Government of Singapore. The findings of this thesis shows that there is a general lack of support in Singapore towards the establishment of property trust funds. This is due to the fact that this financial product is still considered relatively new within the region and there is a shortage of experienced and skilled property trust fund managers in Singapore to develop it. The Singapore government, ever protective of Singapore's reputation as a world-class financial center, has so far been cautious with the handling of this investment vehicle.

The results of the surveys conducted indicate that most real estate professionals believe that property trust funds will be useful for the Singapore property market mainly because property trust funds provide an alternative form of real estate investment. The property trust funds' ability to provide a new source of capital was not considered as important, when compared with the trust funds' ability to provide risk diversification for the small real estate investors. Currently, small investors in Singapore are able to invest directly into the stocks of public listed real estate companies that are locally incorporated. In the recent years, these stocks have been performing better than most unit trusts. Consequently, most investors are very skeptical of the unit trusts performance in Singapore and as such, have indicated only a moderate interest to invest in property trust funds.

There are definitely prospects for establishing property trust funds in Singapore. However, the feasibility of establishing such trust funds at the present is sub-optimal because of the current conditions of real estate and equity markets. Nevertheless, the establishment of property trust funds in Singapore would not be too far away in the future, once certain conditions have been met. This would then yield opportunities for better risk diversification and greater real estate opportunities to institutional investors, fund managers, real estate developers, and as well as the man on the street.
ACKNOWLEDGEMENTS

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1. Overview Of Singapore Economy

1.1 Overview

Singapore is an independent city-state in South East Asia comprising of one major island and more than 50 small surrounding islets. It is located off the southern tip of the Malay Peninsula, approximately 137 kilometers north of the Equator. Singapore’s main island is about 42 kilometers in length and 23 kilometers in breadth. The total area of the republic is approximately 646 square kilometers. It is one of the most important port cities and commercial centers of SouthEast Asia. Table 1 below tabulates the various land uses in Singapore.

Table 1: Land Use in Singapore (Source: Department of Statistics)

<table>
<thead>
<tr>
<th>Land Use Description</th>
<th>Area in square km.</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL LAND AREA (MAIN ISLAND AND OFFSHORE ISLANDS)</td>
<td>641.4</td>
<td>100%</td>
</tr>
<tr>
<td>BUILT-UP AREAS (INCLUDING NEW INDUSTRIAL SITES)</td>
<td>316.5</td>
<td>49.35%</td>
</tr>
<tr>
<td>FARM HOLDING AREAS (OF LICENSED FARMS, EXCLUDING LAND OCCUPIED BY PURE RUBBER AND COCONUT PLANTATIONS)</td>
<td>6.9</td>
<td>1.08%</td>
</tr>
<tr>
<td>FOREST</td>
<td>28.6</td>
<td>4.46%</td>
</tr>
<tr>
<td>MARSH AND TIDAL WASTE</td>
<td>15.7</td>
<td>2.45%</td>
</tr>
<tr>
<td>OTHERS (INLAND WATERS, OPEN SPACES, PUBLIC GARDENS, CEMETERIES, NON-BUILT UP AREAS IN MILITARY ESTABLISHMENTS, QUARRIES, RUBBER AND COCONUT PLANTATIONS AND UNUSED LAND)</td>
<td>273.8</td>
<td>42.69%</td>
</tr>
</tbody>
</table>

1.2 Population

The population estimated in mid-1995 was 3.0 million. The overall population density was approximately 4500 persons per square km. The population is ethnically diverse and consists principally of Chinese (77.4%), Malays (14.2%), and Indians (7.1%). The country
has four official languages: English, Mandarin Chinese, Malay, and Tamil. English is the language of administration.

1.3 Political Background

Singapore is a republic with a parliamentary system of government. The President is the Head of State and is elected by Parliament after every four-years period. The President performs purely ceremonial functions although the constitution has recently been amended in 1991 to give the president veto powers over government budgetary matters and major civil service appointments. The constitution now allows the citizens to elect the president directly. Legislative power is vested in the Parliament, the 81 members of which are popularly elected. The President appoints as Prime Minister the Member of Parliament who commands the confidence of the majority of the Members of Parliament.

The Prime Minister and fourteen Ministers from the cabinet are responsible collectively to Parliament. The current Prime Minister is Mr. Goh Chok Tong, who took over from Singapore's Prime Minister of 31 years, Mr. Lee Kuan Yew. The ruling People's Action Party (PAP) has been in power since 1959, having won nine general elections in succession. In the last general election in August 1991, the PAP won 77 out of 81 parliamentary seats.

1.4 The Economy

Despite Singapore's lack of natural resources, Singapore has enjoyed good economic growth for more than two decades and it currently has one of the highest standards of living of any country in Asia. The average annual economic growth rates were over 8% between the 1960s and the recession of 1985. The economy expanded by 9.9% in 1993, up from 6% in
1992 because of the buoyant growth in trade, recovery in the US economy and boom in the regional economies. Singapore is a member of the Association of SouthEast Asian Nations (ASEAN) together with Brunei Darussalam, Indonesia, Malaysia, Philippines and Thailand. ASEAN is a trade alliance intended to foster economic cooperation among its members and to establish a joint market for attracting foreign trade and investment.

1.5 Economic Indicators

Singapore’s per capita GNP has been increasing steadily from SGD $1,330 to SGD $31,182 for the year 1960 to 1994. Table 2 summarizes progress since 1960:

| Table 2: Singapore Economic Indicators |
|---|---|---|---|---|---|
| Population (million) | 1.6 | 2.1 | 2.3 | 2.7 | 2.9 |
| Employment | | | | | |
| Employed (’000) | 449.0 | 644.0 | 1,073.0 | 1,469.0 | 1,649.3 |
| Unemployment rate (%) | 4.9 | 6.0 | 3.0 | 1.7 | 2.6 |
| Gross Domestic Product | | | | | |
| At current market prices ($m) | 2,150.0 | 5,805.0 | 25,091.0 | 63,673.0 | 105,313.0 |
| At 1985 market prices (annual change %) | 8.7 | 9.4 | 7.2 | 8.3 | 10.1 |
| Per Capita Gross National Product ($) | 1,330.00 | 2,825.00 | 9,941.00 | 21,372.00 | 31,181.70 |
| Gross National Saving ($m) | -52.30 | 1,130.00 | 8,282.00 | 28,851.00 | 52,178.30 |
| Inflation Rate (annual change %) | 1.2 | 5.6 | 2.7 | 3.4 | 3.1 |
| Total Trade ($m) | 7,555.00 | 12,290.00 | 92,797.00 | 205,012.00 | 303,723.00 |
| Domestic Exports | 217.00 | 1,832.00 | 25,805.00 | 62,754.00 | 88,533.30 |
| Imports | 4,078.00 | 7,534.00 | 51,345.00 | 109,806.00 | 156,395.80 |
| Tourists arrivals (’000) | 90.0 | 522.0 | 2,562.0 | 5,323.0 | 6,899.0 |
| Official Foreign Reserves ($m) | NA | 3,098.00 | 13,758.00 | 46,521.00 | 85,165.50 |

1.6 Economic Sectors

Generally, there are five main economic sectors in Singapore: commerce, construction, financial and business services, industrial manufacturing and, transport and communications. Agriculture is relatively unimportant to the economy because of the limited land area and the relatively poor soils, but market vegetables and fruits are grown.
Table 3 below outlines the performance of these five sectors in the last two years.

### Table 3: Performance of Various Economic Sectors

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MANUFACTURING</td>
<td>12.1</td>
<td>12</td>
<td>12.9</td>
<td>8.3</td>
<td>7.5</td>
</tr>
<tr>
<td>CONSTRUCTION</td>
<td>14.2</td>
<td>16.5</td>
<td>15.7</td>
<td>3.4</td>
<td>8</td>
</tr>
<tr>
<td>COMMERCE</td>
<td>10.2</td>
<td>8.4</td>
<td>9.1</td>
<td>8.8</td>
<td>9.3</td>
</tr>
<tr>
<td>TRANSPORT &amp; COMMUNICATION</td>
<td>11.4</td>
<td>11.2</td>
<td>10.8</td>
<td>10</td>
<td>11.4</td>
</tr>
<tr>
<td>FINANCIAL &amp; BUSINESS</td>
<td>16.5</td>
<td>1.4</td>
<td>9</td>
<td>5.3</td>
<td>8.2</td>
</tr>
</tbody>
</table>

*Source: Department of Statistics*

In the 1960s, labor intensive industries were encouraged, as the priority was job creation. However, by the early 1970s, there was a shift in emphasis when full employment was achieved, to more capital intensive industries that require more sophisticated skills and technology. New financial schemes were introduced, tax incentives were improved and industrial personnel training were intensified to create higher skilled jobs that produce quality products. Since the 1960s, the industry has grown rapidly and Singapore now produces a diversity of goods, including chemicals, pharmaceuticals, electronic items, clothing, plastics, rubber products, steel pipes, plywood, and processed foods. Shipbuilding and petroleum refining are also important. The leading industrial area is the Jurong Industrial Estate.

Singapore is a major world port and majority of its trade involves the transshipment of goods produced in the region. In 1994 annual imports cost SGD $100 billion while exports earned SGD $96 billion. Singapore's principal trading partners include the United States, Japan, Malaysia, China, Taiwan, Germany, and Hong Kong. Tourism and international banking are important sources of foreign exchange revenue. The unit of currency is the Singapore dollar (US $1 equals SGD $1.41 July 1996).
1.7 Economic Growth Prospects

Often described as an economic miracle because of the high growth rates it achieved over the last two decades, Singapore is today a reputable financial center, the world’s busiest port and a top location for investments. The country’s assets as a business hub includes its excellent infrastructure; its strategic location; its skilled and industrious work force; and a government whose approach to business is both pragmatic and flexible.

Singapore also aims to become an important strategic node for global companies in the Asia-pacific region, the gateway to Asia and a total business center. Companies are encouraged to develop a total business capability within Singapore by carrying out not just the production but also design, product development, technical servicing, marketing and distribution, fund management and regional business management.

The Swiss-based World Competitive Report (1995) rated Singapore as the second most competitive economy in the world, trailing only behind the US. Singapore also emerged in 1995 as the second ranked nation in Euromoney’s country risk poll, behind Switzerland. Another risk analysis firm, the Washington based Business Environment Risk Intelligence (Beri) ranked Singapore as the world’s second best investment spot in 1995 and for the next five years, behind Switzerland.

Since 1985, investment commitments in Singapore have continued to rise steadily. The top investor was the US accounting for SGD $2.45 billion in 1994. In the same year, Europe and Japan accounted for SGD $907 million and SGD $914 million respectively.
1.8 Key Success Factors

Factors that contribute to Singapore's continuing success are:

- **High Literacy Rate and Sound Education Policy**

  Singapore's literacy rate is 91.3%, one of the highest in Asia. English is the most widely used language in Singapore. Other languages include Malay and Tamil. Its multilingual heritage helps to make it a natural gateway for doing business with the world.

- **Political Stability**

  The ruling PAP has in one generation, transformed an island of slums into a nation with one of the highest standards of living in Asia. The transformation was achieved largely through the Government's successful efforts in encouraging foreign direct investments with sound economic policies and attractive investments incentives.

- **Social Stability**

  The compulsory savings scheme i.e. Central Provident Fund (CPF\(^1\)) provides workers with financial stability when they reach retirement. The CPF scheme has evolved over the years into a very comprehensive social security scheme that allows the workers not only to plan for their retirement but also their health care and home ownership concerns.

- **Stable and Harmonious Labor-Management Relationship**

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\(^1\)The CPF is a compulsory saving scheme for the workers to provide workers with retirement benefits. The current rate of contribution is 20% of gross monthly salary to be contributed by employee and 20% from employer. The total 40% is distributed to the Ordinary Account, the Special Account and MediSave Account. The maximum amount that can be used for housing is 30% and this is to be taken from the Ordinary Account. The balance of 10% can only be used after retirement and for medical bills.
Beri has consistently ranked Singapore workers as one of the world’s best and most productive workers since its labor force evaluation measures was published in 1978.

The high degree of industrial harmony and peace in Singapore is a result of the wage guidelines set by the republic’s tripartite body: National Wage Council (NWC). This body was formed by representatives from the Government, the workers unions and the employers. NWC issues wage guidelines every year that serve as a basis for wage negotiation between the employers and unions that work together to promote and advance national interest.

- **Excellent infrastructure and services**

  Singapore has a well-developed infrastructure that meets all the needs of the business and industry. It is the telecommunications center of SouthEast Asia. It has one of the world’s best airport served by 67 international airlines operating 2,970 flights a week. Its port is one of the world’s busiest and Singapore has the third largest oil refining center after Rotterdam and Houston. Finance services and commercial facilities are also well developed, sophisticated to worlds standards, making it not only a manufacturing base, but a Total Business Center.

- **Strategic location**

  Singapore is a cosmopolitan city state located at the crossroads of international trade routes. The time zone in which the Republic lie allows its financial institutions to trade with Europe, the US and Japan within a working day hence, making it an important financial, foreign exchange and offshore center.
• **Industrious Work force and Skilled Labor**

  Singapore has a young English-speaking work force that is energetic, conscientious and receptive to modern developments in science and technology. According to the Labor Force Survey 1994, the estimated number of employees was 1.65 million in June 1994. The two largest sectors are manufacturing and commercial. Each sector employs approximately 422,500 workers and 376,900 workers respectively. These two sectors together made up nearly 50% of the entire work force. Professional and technical workers form approximately 22%, clerical workers form 15% while sales plus service workers form the remaining 13% of the work force.

• **Asean economic cooperation (ASEAN) and Growth Triangle**

  The Asean Governments have progressively made advances in their commitment to liberalize the intra-regional trade and investments through the Common Effective Preferential Tariff Scheme (CEPT). The Economic Ministers of the Asean countries have announced their intentions to reduce tariffs to 0-5% by the year 2003. The economic cooperation between Singapore and its two Asean partners, Indonesia and Malaysia entered a new phase in 1990 with the proposal of the Growth Triangle that promotes regional investments. Such investment activities within the three neighboring countries will make full use of the mix of resources such as sophisticated infrastructure, management and technical expertise, labor and land.

• **International Business Development Outlook**
Singapore has always maintained an international business outlook. It is home to many multinational companies that use Singapore as one of their global base. At the same time, Singapore companies have also actively invested in the region and beyond. A few examples of Singapore investments into industrial parks and resort developments within the regions include the Suzhou Industrial Park and the Wuxi Industrial park in China; Batamindo and Bintan Industrial Park; the Bintan Beach International Resort in Indonesia; the Bangalore IT Park in India; Karimun Marine and Petroleum Complexes and the Vietnam-Singapore industrial Park in Vietnam.

1.9 Economic Forecast

Singapore’s economic growth rate in 1996 is expected to exceed 7%. This rate is slightly less than the previous year indicating that the economy will slow down as Singapore becomes more developed. Singapore’s goal in the 1990s is to become a developed nation in terms of education and skill level, range and sophistication of economic activities, capital invested per worker, productivity and the standard of living. The Strategic Economic Plan (SEP), which is the long-term economic blueprint for Singapore that was unveiled in 1991, envisaged that by the year 2030, Singapore would catch up with the US on a moving target basis to become an advanced developed country. In 1984, Mr. Goh Chok Tong, then the Deputy Prime Minister, set a target that Singapore would become a developed country in 15 years i.e. by 1999, with a per capita GNP equal to what Switzerland attained in 1984. The difference between the two targets is that SEP sets ‘moving targets’ while that of Vision 1999 is a stationary one. Singapore was proclaimed an advanced developed country by the Organization for Economic Cooperation and Development (OECD) from 1996.
The Economic and Social Survey of Asia and the Pacific released by the Economic and Social Commission for Asia and the Pacific (ESCAP), an agency of the United Nations stated that as the economy slows down, the inflation rate will move up from 1.7% in 1995 to 2.5% to 2.8% in 1996 and 1997 respectively. Table 4 below records ESCAP’s findings. Relative to the other South East Asian countries, Singapore’s inflation remains low.

<table>
<thead>
<tr>
<th>Country</th>
<th>Real GDP %</th>
<th>Inflation %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>7</td>
<td>7.2</td>
</tr>
<tr>
<td>Malaysia</td>
<td>8.5</td>
<td>8.6</td>
</tr>
<tr>
<td>Philippines</td>
<td>6.4</td>
<td>7.1</td>
</tr>
<tr>
<td>Singapore</td>
<td>7.3</td>
<td>7</td>
</tr>
<tr>
<td>Thailand</td>
<td>8.4</td>
<td>8.2</td>
</tr>
<tr>
<td>Vietnam</td>
<td>9.9</td>
<td>10.6</td>
</tr>
<tr>
<td>SouthEast Asia</td>
<td>7.6</td>
<td>7.6</td>
</tr>
</tbody>
</table>


Economic growths in the region’s developing countries remain strong, averaging 7.8% in 1995 against a world average rate of 2.6% growth rate. ESCAP forecasts that the average growth rate will decline to 7.4% in 1996 and 7.2% in 1997 when the world average growth rates are projected to rise to 3%. The slowdown in the regions reflects policy restraints that are being used in a few of the faster growing economies. The policies are intended to prevent an overheated economy in the face of constraints such as labor and skill shortages and infrastructure bottlenecks.

1.10 Conclusion

Singapore has all the potential to attract more foreign direct investments in the near future. Apart from being situated in an emerging market region, Singapore has a strong,
forward-looking government, internal social stability, efficient services and enviable human resources that helps it to maintain its competitive advantage in the world markets.
2. The Financial Markets In Singapore

2.1 Overview

In view of Singapore’s traditional role as a center of regional trade and industrialization of the economy in the 1960s, the financial sector was developed for servicing trade and industry. The development strategy to strengthen Singapore as a financial center includes a wide range of new and sophisticated financial facilities that are now available to both domestic and overseas investors, borrowers and traders.

2.2 Developing Singapore Into an International Financial Center

The development of Singapore as an international financial center is a part of a conscious development strategy of the Government since the 1970s. The Monetary Authority of Singapore (MAS) is mainly responsible for the strategy to achieve this objective and has given emphasis to building a sound and progressive financial center.

The key elements that are recognized by the Government as requirements needed to build a successful financial center are as follows:

- **Strong Domestic Economy**

  The Singapore economy has generally been performing remarkably well since the late 1960s and early 1970s, except for a short period of recession in 1985 when it lost its competitiveness in the world market.

- **Stable Currency**
In recent years, the Singapore dollar (SGD) has appreciated in value against major
currencies in the foreign exchange market (see Table 5).

**Table 5: Exchange Rates for 1984-1994**

<table>
<thead>
<tr>
<th>Period</th>
<th>US dollar</th>
<th>Sterling Pound</th>
<th>Deutsche Mark</th>
<th>Japanese Yen</th>
<th>Malaysian ringgit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984</td>
<td>2.1331</td>
<td>2.8486</td>
<td>0.7517</td>
<td>0.8987</td>
<td>0.9104</td>
</tr>
<tr>
<td>1986</td>
<td>2.1774</td>
<td>3.1958</td>
<td>1.0074</td>
<td>1.301</td>
<td>0.8441</td>
</tr>
<tr>
<td>1988</td>
<td>2.0124</td>
<td>3.5837</td>
<td>1.1488</td>
<td>1.5713</td>
<td>0.7691</td>
</tr>
<tr>
<td>1990</td>
<td>1.8125</td>
<td>3.2262</td>
<td>1.1223</td>
<td>1.2548</td>
<td>0.6702</td>
</tr>
<tr>
<td>1992</td>
<td>1.629</td>
<td>2.8762</td>
<td>1.0451</td>
<td>1.2869</td>
<td>0.6398</td>
</tr>
<tr>
<td>1994</td>
<td>1.5274</td>
<td>2.3377</td>
<td>0.9423</td>
<td>1.2951</td>
<td>0.5823</td>
</tr>
</tbody>
</table>

Figures refer to average rates per year

*Source: Monetary Authority of Singapore*

- **Strategic Location**

Singapore is strategically located as a financial center because of its position in world
time zones. Singapore is eight hours ahead of Greenwich Mean Time, and has a
working day overlapping that of both Europe and Asian financial centers. Money
dealers in Singapore can therefore conduct round-the-clock financial services that are
important in an international monetary system of floating currencies and price changes
that are sensitive to any major world event.

- **Presence of International Institutions**

Singapore is served by many financial institutions of international repute and is ranked
fourth in the world (after London, New York and Hong Kong). The ranking is based
on the number of banks present. The world’s top banks are represented and these
banks provide an effective mechanism to direct the flow of surplus funds into productive investments within the region.

- **Active Domestic Banks**

  Singapore’s local banks are active in international banking. These banks are present in the major cities of Asia, Europe and United States. In terms of their financial strength, three of the four local banks are ranked among the top 500 banks in the world according to the American Banker 1990. (see Appendix 2A)

- **Banking Expertise, New Financial Instruments and New Financial Markets**

  The international financial institutions have brought with them expertise that has helped to upgrade the skills of the local bankers. The new expertise has also helped in developing new financial instruments such as the Asian dollar bond, the negotiable certificate of deposit (NCD), the floating rate of deposits (FRCD) and others. Basically, investors are provided with a wide range of investment options. New financial markets such as Asian Dollar Market and SIMEX started operation in 1968 and 1984 respectively. In 1987, the American security of Government National Mortgage association (GNMA) was listed on the Singapore Stock Exchange.

  With the objective of developing Singapore into an international financial center, the Government has taken steps to create the right incentives and climate for the international financial centers to establish their operations here. One such important step by the Government was to establish the MAS in 1971.

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3SIMEX is Singapore International Monetary Fund. Its operations are linked to the Chicago Monetary Exchange (CME) for financial futures trading. The linked is done in a mutual offset system whereby a client can open a contract in one exchange and close it in the other exchange.
2.3 The Monetary Authority of Singapore

The functions associated with a central bank are served in Singapore by the Monetary Authority of Singapore (MAS). It brought monetary operations under central administration, except for the currency issuing function that remains under the Board of Commissioners of Currency. The MAS’s main role is to act as banker, fiscal agent and financial advisor to the Government, to promote monetary stability and credit and exchange policies conducive to the growth of the economy.

As a banker to the financial institutions, the MAS provides banking facilities to the various commercial banks, finance companies and other institutions. These banks are required to comply with the statutory reserve requirements and also to maintain current account balances with the MAS. It administers various statutes pertaining to money and banking, i.e. the Securities Industry Act, the Futures Trading Act, and the Government Securities Act. As a fiscal agent of the Government, the MAS manages the public debts and is responsible for loans raised in overseas financial markets. As a financial advisor, it advises the Government on investment and management of foreign reserves and it issues and processes applications for government securities. It is also responsible for formulating and implementing the monetary policies together with the Ministry of Finance to ensure that the monetary policy forms an integral part of the overall economic policy.

2.4 Financial Institutions

The financial institutions operating in Singapore are from a wide geographical area and offer diverse range of sophisticated financial services. These institutions have contributed
significantly to the development of the domestic money market, the gold, foreign exchange and capital markets and Asian dollar and bond markets.

The continued increase in the number of international banks and financial institutions in Singapore testifies to its development as a financial center. As of end-August 1995, there were 141 commercial banks, 76 merchant banks and 59 representative offices of banks and merchant banks in Singapore. In addition, there were 9 international money brokers.

2.4.1 Commercial Banks

Of the 141 commercial banks operating in Singapore, 12 are local banks. Of the 129 foreign banks, 22 have full banking licenses, 14 have restricted banking licenses and 93 have offshore banking licenses. As at end-August 1995, 133 commercial banks were granted approval to transact in Asian Dollar Market through the operation of Asian Currency Units (ACUs). Appendix 2B shows the composition of commercial banks in Singapore.

Restricted banks are generally branches of foreign banks that are not allowed to offer savings account services to the public. These banks are limited to accept time deposits of a minimum amount of SGD $250,000 per deposit. They are allowed to deal in foreign exchange and to operate Asian currency units. These restricted banks are usually allowed to operate from a single office in the Republic.

Foreign offshore banks deal mainly in Asian dollar units and foreign exchange transactions. Their activities are generally concentrated on wholesale banking business with non-residents. These banks are permitted to accept foreign currency deposits from residents.

\textsuperscript{3}Asian Dollar Unit : a specialized department within a financial institution approved by the MAS to operate in the Asian Dollar Market.
and transact other banking business excluding savings account services and time deposits of
less than SGD $250,000. These banks are also allowed to engage in Singapore dollar
financing to resident borrowers but is limited to a total amount of $120 million per bank.

2.4.2 Merchant Banks

Merchant banks provide services like investment and financial advisory services, portfolio management, underwriting and corporate financing services. Rapid economic development has attracted many merchant banks to Singapore, to use it as the base of their operations in a fast growing region with increasing capital intensive investments. A number of the merchant banks have achieved wider regional operations with the development of Singapore as a financial center.

2.4.3 Representative Offices

These offices were not allowed to conduct any banking business, and act as liaison offices for their parent institutions, providing information on financial and economic conditions in Singapore and neighboring countries. They look out for the interest of their parent banks. The representative offices are from large international banks enjoying wide connections, particularly with the SouthEast Asian region.

2.4.4 Financial Companies

Finance companies, of which there are currently 27, may collect deposits from the public but cannot operate current accounts. They cannot deal in gold and foreign exchange, grant unsecured loans in excess of S$5,000, or issue Singapore dollar negotiable certificates of
deposit. These financial institutions make loans to all kinds to businesses, especially small businesses under the Local Enterprise Finance Scheme.  

2.4.5 Insurance Companies

As of 1991, Singapore has 135 registered insurance companies that concentrates on two major categories of insurance: life and general business insurance. The 135 companies comprise of 60 direct insurers, 29 professional reinsurers, and 46 captive insurers. The MAS is responsible for the registration of insurers to ensure that the terms and conditions are satisfied. As of December 1992, a new set of investment guidelines on the maximum limits of investments in different asset classes, e.g. equities, real estate, unsecured loans and foreign assets, took effect to protect the interest of the policyholders. Table 6 shows that up to 20% of insurance companies' funds are allowed exposure to real estate related investments.

Table 6: New Investment Guidelines for Insurance Companies

<table>
<thead>
<tr>
<th>Life Insurers: New Investment Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset Class</td>
</tr>
<tr>
<td>EQUITIES*</td>
</tr>
<tr>
<td>PROPERTIES AND PROPERTY SHARES</td>
</tr>
<tr>
<td>FOREIGN CURRENCIES AND INVESTMENTS</td>
</tr>
<tr>
<td>UNSECURED LOANS#</td>
</tr>
</tbody>
</table>

* 1. MAXIMUM OF 5% IN SESDAQ AND UNQUOTE SHARES
2. MAXIMUM OF 5% IN ANY ONE COMPANY OR GROUP
# MAXIMUM OF 2.5% IN ANY ONE COMPANY OR GROUP

Source: Singapore Business Times, 13 February 1992
The total insurance premiums as stated in the MAS Annual Report 1991/1992 amounted to SGD $3.2 billion, which is an increase of 19% over 1990’s figures. Total assets of the industry had also expanded by 17% to SGD $10 billion by 1992.

2.5 Financial Markets

Generally, there are nine types of financial markets in operation in Singapore. These include the Asian Dollar Market, Asian Bond market, Money market, Capital Market, Equity Market, Foreign Exchange Market, Gold Market, Financial Futures Market and the RAS Commodity Exchange.⁶

2.5.1 The Asian Dollar Market

The Asian Dollar Market, centered in Singapore, is an internal money market in foreign currencies having as its objective the pooling of foreign holdings in Asia and their utilization for productive activities in the region. The Asian dollar is simply defined as US dollars circulated outside of United States, e.g. US dollars deposited in Singapore or Tokyo banks are considered as Asian dollars. When the same funds are deposited in Zurich or London, the funds are considered as Eurodollars. Participants in this market include Asian currency units (ACUs), central banks and governmental monetary authorities, multinational corporations, and individuals. Nearly 200 ACUs operate in Singapore.

2.5.2 The Money Market

A money market is defined as a financial market dealing in foreign currencies and other short-term and long-term financial instruments. To differentiate the money market from its

⁶RAS is the Rubber Association of Singapore set up to promote and regulate the rubber industry in Singapore. It has clearing house facilities and will endorse certificate of origin documents relating to the rubber trade.
long-term counterpart i.e. the capital market, the money market is restricted to the market for short-term funds and instruments such as treasury bills, NCDs, short-dated government securities, bills of exchange and other commercial papers. The major participants in the Singapore money market are commercial banks, merchant banks, money brokers and the MAS.

2.5.3 The Capital Market

The capital market is a financial market for long-term funds and it is made up of two major segments: the government securities market and the corporate securities market. In the corporate securities market, there are two major types of securities, i.e. equities and bonds. The volume of corporate bond issues is negligible compared to the equities in the Singapore context. Major companies that raised capital through the issuance of shares have to seek listing on the Stock Exchange of Singapore (SES). Small and medium size enterprises (SMEs) that raised capital through shares offering will list on the Stock Exchange of Singapore Dealing and Automated Quotation system (SESDAQ). 

2.5.4 Promotion of Capital and Money Markets

To foster the growth of Singapore as a leading international financial center, high priority is accorded to the creation of an active, sophisticated domestic and regional money market. Exchange control was completely liberalized on 1 June 1978 to remove restrictions on movements of funds.

The Singapore Government securities market was restructured in May 1987. Since then, taxable book-entry (scripless) Government securities, ranging in maturity from three

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1SESDAQ is essentially a separate market that allows the listing of young Singapore companies with good growth prospects. Transactions in SESDAQ are settled on a scripless basis.
months to seven years, have been issued regularly by auction at market determined interest rates. The objectives of developing this market are to provide investors with a risk-free benchmark for pricing long-term issues, and to develop skills in the fixed income markets.

The Government’s strategy for the future would be to build on the existing infrastructure and to improve the capital market. Related activities such as risk and investment management will also be improved in order to develop Singapore into an international fund management center. Some of the incentives given are as follows:

- **Tax Exemption for Offshore Fund Management**

  In a major effort to promote offshore fund management activities in Singapore, the Government announced a tax exemption scheme for offshore fund management on 19 September 1983. The scheme exempts income earned by non-residents from Singapore tax if their funds are managed by fund managers approved under the scheme and invested in approved assets. The managed fees earned by fund managers would only be taxed at a concessionary rate of 10%. As at end-August 1995, 101 fund managers were approved under the scheme.

- **Other Tax Concessions**

  Tax concessions were also given for Finance and Treasury Centers, Offshore Syndication operations, and income derived by ACUs.
2.5.5 The Equity Market

The Equity market provides an important avenue for Singapore companies to raise long-term capital. Capital is raised through public issue of securities or through private placements.

The stock broking industry has been greatly strengthened by a series of measures that were initiated in 1986. Chief amongst these were the passing of a new Securities Industry Act and the opening up of local stock broking firms to ownership by local and foreign financial institutions. In addition, brokerage rates were shaved as brokerage houses adopted a graduated commission scale to ensure they are competitive and in line with international levels of commission rates.

A settlement system based on the five-day rolling settlement system in the United States was also adopted to enable more efficient settlement of trades. To enhance settlement efficiency, all Main board Singapore stocks have been converted to a computerized book-entry settlement, doing away with the inconvenience of a physical delivery system. The result has been a stock broking industry that is better capitalized and more competitive, and that offers a better range and quality of services and better investor protection. Appendix 2C shows the Turnover on stocks and shares during 1985-1994.

As at September 1995, there are 240 companies listed on the main board with a total of 81.6 billion shares and a market capitalization of $262.2 billion. The 44 companies now listed on SESDAQ have a total of 4.5 billion shares worth $4.2 billion.

Attracted to the benefits of the new issues market, companies are showing increasing interest in listing their shares. Following the Government's policy of privatizing state-owned
companies, a number of Government-controlled companies have been listed in stages, with more to come. This will broaden the investment opportunities in the listed securities market. The release of Central Provident Funds (CPF) for personal investment in approved equities has also contributed to a more active market.

2.6 The Stock Exchange of Singapore

The Stock Exchange of Singapore (SES) was incorporated in May 1973. As at August 1995, it has 33 member companies with a combined paid-up capital of $1088 million. Requirements for membership are 1) a minimum paid-up capital of S$350 million; and 2) a seat on the SES.

2.6.1 Supervision and Regulation of the Securities Industry

SES, stock broking companies and their representatives are regulated by the Securities Industry Act and Regulations that are administered by MAS. SES is self-regulated by means of a overall Committee comprising elected stock broking members and non-stock broking members; secular sub-committees and SES member companies which deal with specific functions of SES such as disciplinary and listing matters.

SES member companies must meet certain financial conditions prescribed under the Rules and Bye-laws of SES. These include the maintenance of an adjusted net capital of at least S$10 million, limits on gearing ratio\(^8\), limits on single client and security exposure, and maintenance of a reserve fund.

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\(^8\)Gearing ratio is equivalent to the Debt to Equity Ratio.
2.6.2 Listing Requirements

Public offer of securities are governed by the provisions of the Companies Act, Securities Industry and SES Listing Manual. The requirements for listing on SES are as follows:

2.6.2.1 Locally Incorporated Companies
1. must have a minimum issued and paid-up capital of S$15 million, of which at least S$4 million or 25% (whichever is greater) should be owned by not fewer than 1000 shareholders.

2. must have a minimum track record of five years with profits in each of the last three years and, a cumulative pre-tax profit of at least S$7.5 million for the last 3 years and a minimum pre-tax profit of S$1 million in each of the three years.

3. must have adequate working capital

4. must show continuity in management

2.6.2.2 Companies Seeking Quotation Of Debt Security
1. must have at least S$750,000 of debt securities of the class to be quoted, and which must be owned by at least 100 holders

2. the securities must be created and issued in accordance with a Trust Deed

2.6.2.3 Secondary Listing Of Foreign Companies
1. must already be listed on their home exchange

2. have a market capitalization of at least S$50 million

3. have had a cumulative pre-tax income of not less than S$15 million for the last three years or a minimum pre-tax profit of at least S$2 million for each of the three years

4. have at least 2,000 shareholders worldwide
2.6.2.4 Investment Funds Denominated In Foreign Currency

1. must be managed by a reputable and established management company with at least a five-year track record

2. must have a minimum fund size of US $20 million

2.6.3 Trading System

When SES implemented a fully computerized trading system in March 1989, it became the first Asian exchange to abandon the trading floor.

2.6.4 Over-The-Counter

On 2 January 1990, the Exchange introduced an OTC market (over-the-counter), known as CLOB International to allow investors to trade in a number of international securities that are listed on foreign stock exchanges. Presently, 129 counters are traded on CLOB International, including 112 Malaysian, 10 Hong King companies and seven other companies.

2.6.5 Book-based Settlement System

With the implementation of a book-based settlement system for main board securities in May 1990, share ownership and changes in ownership of immobilized securities are effected by book entries in the securities accounts of depositors. Scrips lodged at the Central Depository (Pte) Ltd or CDP are registered in its name. CDP acts as a central nominee that holds securities on behalf of the depositors.

2.7 Singapore International Monetary Exchange System

Singapore International Monetary Exchange System (SIMEX) provides a financial futures market, contracts being traded in futures and options (Deutsche marks, Japanese yen,
Eurodollars, and Euroyen) and in futures only (in Nikkei stock averages, UK pounds sterling, gold, high sulfur fuel oil, some of these contracts with the Chicago Mercantile Exchange takes place under a mutual offset system. SIMEX is self-regulating, although the Futures Trading Act confers some regulatory powers on the MAS.

The foreign exchange market in Singapore has flourished with the admission of foreign banks and international money brokers, the flotation of the Singapore dollar in 1973, and the abolition of exchange controls in 1978. Participants in this market include commercial brokers, central banks, and non bank customers.

2.8 Conclusion

The development of Singapore into an international financial center has been greatly aided by the country’s political stability and strong currency. Other factors include its attractive tax incentives, absence of exchange controls, excellent financial services, and time-zone advantages that facilitate the undertakings of financial transactions in both Europe and the Far East in a single trading day.

The import of international expertise in the fields of banking, merchant banking, fund management, insurance, stock broking and foreign exchange are actively encouraged by the Singapore authorities. Although the molding of Singapore as a financial center is based on the experience of established centers in America and Europe, it is hoped that the result will suit the particular needs of Singapore and the SouthEast Asian region. A great deal of progress has been made in a short time and international institutions have been quick to respond.
3. The Real Estate Market In Singapore

3.1 Overview

The total real estate investment sales figure for the entire year of 1995 was SGD $7.56 billion, an increase of 2.3% over 1994’s figure of SGD $7.39 billion. Figure 1 shows a breakdown of 1995 investment sales into the various property sectors. The residential sector dominated the market with a 39% share of total investment sales while the commercial sector constituted 16% of total investment sales in 1995.

Figure 1: Investment Sales Composition, 1995

<table>
<thead>
<tr>
<th>Property Sector</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>39%</td>
</tr>
<tr>
<td>Commercial/Industrial</td>
<td>14%</td>
</tr>
<tr>
<td>Retail/Commercial</td>
<td>18%</td>
</tr>
<tr>
<td>Mixed</td>
<td>13%</td>
</tr>
<tr>
<td>Office</td>
<td>16%</td>
</tr>
<tr>
<td>Shophouses</td>
<td>18%</td>
</tr>
</tbody>
</table>

Source: JLW Research, January 1996

3.2 Real Estate as an Investment Class

The investment sale figures above clearly indicate that the demand for real estate investments has continued to grow and is expected to remain firm. Table 7 below shows that the amount of investment made in the construction industry by foreign equity has also risen since 1985.

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9Approximately 54% of the total investment sales comprise of private treaty sales that includes sales of private development sites and sales of private investment properties. Government sale of sites accounted for 46% of the remaining total investment sales.
Table 7: Foreign Equity Investments in Singapore by Industry ($ million)

<table>
<thead>
<tr>
<th>Industry</th>
<th>1985</th>
<th>1987</th>
<th>1989</th>
<th>1991</th>
<th>1992</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign Equity Investment (I+II)</td>
<td>25,503</td>
<td>34,540</td>
<td>47,030</td>
<td>62,911</td>
<td>65,351</td>
</tr>
<tr>
<td>(I) Direct Investment</td>
<td>22,355</td>
<td>29,947</td>
<td>41,063</td>
<td>54,563</td>
<td>56,661</td>
</tr>
<tr>
<td>Agriculture &amp; Fishing</td>
<td>72</td>
<td>40</td>
<td>45</td>
<td>83</td>
<td>137</td>
</tr>
<tr>
<td>Mining &amp; Quarrying</td>
<td>(39)</td>
<td>(54)</td>
<td>(50)</td>
<td>(40)</td>
<td>(6)</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>11,288</td>
<td>14,566</td>
<td>17,785</td>
<td>20,659</td>
<td>20,034</td>
</tr>
<tr>
<td>Construction</td>
<td>231</td>
<td>176</td>
<td>701</td>
<td>750</td>
<td>608</td>
</tr>
<tr>
<td>Commerce</td>
<td>2964</td>
<td>3,127</td>
<td>4,702</td>
<td>8,562</td>
<td>7,934</td>
</tr>
<tr>
<td>Transport &amp; Storage</td>
<td>(85)</td>
<td>169</td>
<td>907</td>
<td>1,372</td>
<td>1,532</td>
</tr>
<tr>
<td>Financial/Business Services</td>
<td>7,884</td>
<td>11,871</td>
<td>16,878</td>
<td>23,049</td>
<td>26,293</td>
</tr>
<tr>
<td>Social &amp; Personal Services</td>
<td>41</td>
<td>51</td>
<td>95</td>
<td>129</td>
<td>131</td>
</tr>
<tr>
<td>(II) Portfolio &amp; Other Investment</td>
<td>3,148</td>
<td>4,593</td>
<td>5,967</td>
<td>8,347</td>
<td>8,690</td>
</tr>
</tbody>
</table>

Source: Department of statistics

To understand the reason for these trends, the following section explores the incentives, and disadvantages, of investing in real estate in Singapore.

3.2.1 Reasons for Investing into Real Estate in Singapore

1. Land supply is inelastic and since there is land scarcity in Singapore, land value is expected to appreciate in the long-term.

2. Real estate is a useful inflation hedge: its value appreciates with inflation and decrease in a recession, compared to cash. Furthermore, if the property is in the prime areas, the risk of property value depreciation is lower on a long-term basis.

3. Property can be used as a collateral for other investments opportunities.

4. The strong Singapore dollar makes property investment attractive to foreign investors who will make further currency exchange gains upon resale.

5. The law allows all citizens to use their Central Provident Fund (CPF) to pay housing loans and to purchase property.

6. Compared to corporate stocks, investment in real estate is more stable because cash flow from a corporation is determined by product sales which may change daily
depending on market conditions. Real estate cash flow is more stable because of the term structure of the lease, which typically is in the range of 2 to 30 years.

3.2.2 Disadvantages of Real Estate Investment in Singapore
1. Real estate investments involve very high initial costs to cover an initial deposit, stamp duty, legal costs, bank’s commitment fees and agent’s fees.
2. Properties need to be managed well for their return to remain competitive and for their overall value to hold.
3. Properties are generally inflexible to the extent that the investor can realize his gains only when a disposition occurs or when he borrows against it as a collateral.
4. Properties are also illiquid when compared to stocks, bonds or bank deposits because it takes time to find a buyer with the right offer. Furthermore, it may also take a couple of months more to close a deal.
5. The value of real estate depends on exogenous factors such as the country’s economy and political situation.

3.3 Current Real Estate Market Situation

Like all real estate markets in the world, the real estate market in Singapore is also very cyclical in nature. The real estate market slowed down and prices subsequently fell during the recession of 1985. During that period to late 1988, local businesses had become less profitable and less competitive. Consequently, investors who could not afford to hold on to their properties had to dispose them at very low values. The crash of the stock market in 1987 further worsened this situation because many of these real estate investors were also heavily invested into stocks.
3.3.1 Property Market Boom

In late 1989, the real estate market started to recover when the Singapore economy improved, which can be seen from Singapore’s GDP growth rates in Figure 2. The recovery is also evident from the increased number of construction contracts awarded between 1993 and 1995, as shown in Appendix 3A.

Along with the economic recovery, there was also an increasing demand from foreign investors for properties located in Singapore. This is because of a perception amongst regional neighbors that Singapore is a haven and refuge for investment funds. Appendix 3B compares the GDP growth rates for various countries in the ASEAN region, which shows that Singapore’s high GDP growth rate and its strong currency make Singapore an investment haven for foreign investors, especially investors from the neighboring ASEAN countries. Political uncertainties in Hong Kong, Taiwan and Indonesia have also made Singapore attractive as a refuge.

*Figure 2 : Annual GDP Growth Rates of Singapore (1995 and 1996 figures are estimated)*

Source: JLW Research Dec., 1995

3.3.2 Property Prices

Rising demand for the four property sectors (i.e. commercial, residential, industrial and retail) in Singapore has caused real estate prices in Singapore to escalate tremendously in
recent years. According to the Property Price Index and Property Rent Index prepared by the Urban Redevelopment Authority of Singapore (URA), the overall property price index rose by 4.4% to 266.5 points by the end of the fourth quarter of 1995. This consisted of a 4.6% rise for residential properties; a 1.3% rise for commercial properties and a 7.1% rise for industrial properties. The property price indexes includes only private properties and are based on 1990’s prices. See Appendix 3C, 3D and 3E for details.

3.3.3 Performance of Property Sectors

The price and rental performance in 1995 for the four property sectors are outlined below:

3.3.3.1 Residential

In 1995, prices of apartments and condominiums rose by 17% while those of landed properties rose by 13%. Apartments and condominiums in prime areas were priced between SGD $1,350 to SGD $1800 p.s.f.\textsuperscript{11} while those outside the prime areas were priced between SGD $700 to SGD $850 p.s.f. Landed property prices ranged between SGD $436 to SGD $615 p.s.f. while residential land prices ranged between SGD $260 to SGD $1000 p.s.f., depending on the location.

Small to medium size apartments and condominiums in Singapore are typically 900 to 1,600 sq.ft.\textsuperscript{12} whereas the larger units are between 2,500 to 4,000 sq.ft. Landed property areas are typically 2,500 to 15,000 sq.ft.

\textsuperscript{10} Based on performance reports by Jones Lang Wootton

\textsuperscript{11} p.s.f. - per square foot.

\textsuperscript{12} sq.ft. - measure of area in square feet.
The average rent increase was 7% over 1995. Condominiums below 1,500 sq.ft. fetched an average of SGD $5,800 per month while condominiums above 2,500 sq.ft. fetched an average rent of SGD $15,000 per month.

A total of 10,500 new residential units came into the market in 1995. However, with only 84% of the entire new supply absorbed in 1995, this absorption percentage was somewhat less than the previous year’s. The overall housing occupancy increased marginally from 94% to 94.2%.

3.3.3.2 Office-Commercial

The average price of strata office and commercial space for the whole island reached SGD $1,365 p.s.f. in 1995. The average price of commercial properties located in the prime financial district areas was SGD $1,650 p.s.f. while those located in the Orchard Road corridor reached SGD $1,700 p.s.f., representing increases of 10% and 17.2% respectively over the preceding year.

The average rental rate was SGD $7.20 p.s.f. per month, reflecting a 25% increase over the previous year. Prime commercial space fetched between SGD $9.60 to as much as SGD $11.00 p.s.f. per month.

Commercial property sizes vary from 5,000 sq.ft. per floor for a medium-sized office at the Octagon, to approximately 10,000 sq.ft. at the Republic Plaza and 14,000 sq.ft. per floor at the Suntec City. All three properties are prominent buildings in the prime commercial area in Singapore.

\[^{13}^{13}\text{Orchard Corridor is the main shopping area in Singapore.}\]
The total stock of commercial property space as of the fourth quarter of 1995 is approximately 36.5 million sq.ft., which is an increase of 6.1% over the corresponding period in 1994. The commercial property sector has experienced stable growth in rental since late 1992, despite the increased supply of office space being developed at the fringe of the financial district. The average occupancy rate for commercial properties for the whole island is 95.2%, while the occupancy rate in the financial district is slightly higher at 97.5%. An estimated total of 5,929,400 sq.ft. of new office space is scheduled for completion between 1996 to 1999.

3.3.3.3 Retail

The average price for prime ground-floor retail space in the suburban shopping areas grew by 3.5% to SGD $880 p.s.f. while in the secondary shopping areas, it grew by 4.2% to SGD $1,250 p.s.f. The average price of ground-floor retail space in prime shopping areas like Orchard Road remained unchanged at SGD $3,100 p.s.f.

Rental rates for prime shopping are between SGD $15.20 to SGD $25.75 p.s.f. per month while those at new suburban areas are going for between SGD $13 to SGD $19 p.s.f. per month.

The existing stock of retail space is 18.2 million sq.ft., a 9.5% increase from the previous year. In recent years, there has been an increase in a number of suburban shopping areas, which by year 1999 would contribute another 5.7 million sq.ft. to the existing stock. Although the overall occupancy rate was estimated at 97.2% for 1995's fourth quarter, this new supply in the suburban areas is expected to provide competition for the prime shopping belt in Orchard Road in coming years.
3.3.3.4 Industrial

The average price for industrial space is between SGD $510 p.s.f. for upper storey space, and SGD $720 p.s.f. for first storey space. Throughout 1995, the demand for industrial space was strong and hence the average vacancy rate was a low 5%. Price increases ranged between 20% to 34%, depending on location.

The average rental rates ranged between SGD $2.20 to SGD $3.00 p.s.f. per month during the fourth quarter of 1995, up 11% and 19% from 1994 figures.

Typical sizes for industrial space range from approximately 20,000 sq.ft. per floor (e.g. the Lindeberg Center) and 120,000 sq.ft. per floor (e.g. the Harbor Links distribution complex).

Following the strong performance of the manufacturing sector in 1994 and 1995, developments in the property sector for factories and warehouses grew by 9.8% during the first ten months of 1995. Investment commitments in this sector also increased from SGD $5.77 billion in 1994 to SGD $6.8 billion in 1995, enhancing the availability of private industrial space by approximately 10.4 million sq.ft. over the next three years.

3.4 Real Estate Ownership Structure

The common forms of real estate ownership in Singapore are 1) sole proprietorships; 2) partnerships; 3) limited companies and 4) public companies. Generally, most real estate in Singapore are owned in partnership, whereby the property is registered in the names of the individual partners either as joint tenants or tenants-in common.
3.4.1 Joint Tenancy

This is a form of co-ownership of property whereby the property is usually owned by two or more owners. The joint ownership structure prohibits the joint owner by will to transfer his rights to another person unless the joint relationship is severed in his/her lifetime. Upon the death of any joint owner, the deceased interest will be vested in survivors.

3.4.2 Tenancy-In-Common

This kind of ownership structure allows the property to be registered to a few persons who have an agreement on the share of ownership. In other words, each owner has a distinctive share in the property and is entitled to dispose of his property as he wishes.

3.4.3 Public Companies

There are 19 public listed companies dealing in real estate currently. Most of these companies are hybrids in the sense that they have significant investments in other businesses besides their core interests in real estate. They also do not focus on any particular property sector, which means that it is not uncommon to find their real estate portfolios consisting of residential, commercial and office properties. A list of the 19 public companies is included in Appendix 3F.

3.4.4 Family-Owned Businesses

There are also a number of family owned property companies in Singapore. These companies generally do not have large capital assets compared to the public listed companies, except for perhaps one company: Far East Organization Private Limited. Such companies are usually managed and controlled by family members.
3.5 Financing Real Estate

Generally, two types of capital can be raised for real estate investment: Equity and Debt. Table 8 shows the common ways by which these two types of capital are raised in Singapore.

*Table 8: Sources of Capital*

<table>
<thead>
<tr>
<th>EQUITY SOURCES</th>
<th>DEBT SOURCES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Individual</strong></td>
<td><strong>Individual</strong></td>
</tr>
<tr>
<td>Personal Savings</td>
<td>Loans from Financial Institutions,</td>
</tr>
<tr>
<td>CPF Savings</td>
<td>Companies</td>
</tr>
<tr>
<td><strong>Company</strong></td>
<td><strong>Company</strong></td>
</tr>
<tr>
<td>Existing shareholders contribution</td>
<td>Loans from Financial Institutions</td>
</tr>
<tr>
<td>New shareholders' contribution</td>
<td>Convertible Debentures</td>
</tr>
<tr>
<td>Public offering</td>
<td>Corporate Bonds</td>
</tr>
<tr>
<td>Private placement</td>
<td></td>
</tr>
</tbody>
</table>

3.5.1 Equity Source

In order to fund their real estate investments, companies can issue common stocks and preferred stocks to their sponsors or to the public. However, the listing requirements of the Stock Exchange of Singapore (SES) and the high costs involved in preparing for a public offering make it difficult for some real estate companies in Singapore to opt for this method of financing (The listing requirements for SES are stated in Section 2.6). Hence, most small to medium size real estate companies would normally depend on commercial banks and finance companies for their financing needs.
3.5.2 Debt Source

Companies can also choose to raise funds by issuing corporate bonds or convertible debentures. Appendix 3G will list a few examples of projects with such funding in Singapore. However, both these methods are still not very popular as evident from the low trading volume of bonds in Singapore. This is mainly because investors are still not as keen on this form of asset class as they are with equity stocks.

3.6 Outlook for the Real Estate Market

The real estate market in Singapore has experienced some fundamental change since the boom in 1992. Overall real estate prices have more than tripled over 1985 prices and more than doubled over 1992 prices. Many investors have come to realize that quick capital gains can be made from all sectors of property investment during this period of time. Consequently, the wealth created has affected the demand for real estate in the following ways:

- Created a demand for investment type properties
  
  Many individual property investors have become more confident in holding good class properties even though the return from rental income is insufficient to cover the interest on the mortgage. This is because investors anticipate high capital gains when they eventually sell the property.

- Created a demand that is leading market prices regardless of the supply situation
  
  The demand for private and public housing, office, retail and industrial space has risen to such a heady level that it is difficult to predict the price or the real estate cycle based on historical averages or past cyclical trends.
• Created a demand that reflects lifestyle instead of a demand that reflects needs.

Individual property owners and company management are in much better positions to upgrade their lifestyles at home and at the office than ever before. Hence, the demand for medium-term investments instead of long-term investments has increased.

Table 9 below shows the projected construction demand for 1996, which has increased substantially due largely to real estate speculation. However, this demand has scaled down tremendously after the Government’s anti-speculation measures that were announced on May 15th, 1996. Designed to stabilize market prices, these new measures address three main areas of property investment: credit, taxation and supply.

Under the Credit aspect, the loan ratio allowable has been reduced from 90% to 80%. The loan amount is defined as either the market valuation or the price of the property, whichever is lower.

Under the Taxation aspect, a new capital gain tax was introduced to tax investors who sell their property within three years of purchase. This tax is explained in greater detail under Section 3.7.4.

Under the Supply aspect, the Government will release more land for private housing development, entertainment, commercial-office and retail developments to soften demand.

Following the anti-speculation measures, there has been a slowdown in the real estate market, particularly in the residential property sector. Most buyers are adopting a ‘wait and see’ attitude in anticipation of a drop in prices.
### Table 9: Projected Construction Demand in 1996 ($S million)

<table>
<thead>
<tr>
<th>Sector/Type of Demand</th>
<th>5,360</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Sector</td>
<td></td>
</tr>
<tr>
<td>Building Construction Sub-total</td>
<td>5,080</td>
</tr>
<tr>
<td>Residential</td>
<td>2,470</td>
</tr>
<tr>
<td>Commercial</td>
<td>1,050</td>
</tr>
<tr>
<td>Industrial</td>
<td>1,280</td>
</tr>
<tr>
<td>Institutional &amp; Others</td>
<td>280</td>
</tr>
<tr>
<td>Civil Engineering Works Sub-total</td>
<td>280</td>
</tr>
<tr>
<td>Public Sector</td>
<td>8,910</td>
</tr>
<tr>
<td>Building Sub-total</td>
<td>6,170</td>
</tr>
<tr>
<td>Residential</td>
<td>3,740</td>
</tr>
<tr>
<td>Commercial</td>
<td>150</td>
</tr>
<tr>
<td>Industrial</td>
<td>280</td>
</tr>
<tr>
<td>Institutional &amp; Others</td>
<td>2,000</td>
</tr>
<tr>
<td>Civil Engineering Works Sub-total</td>
<td>2,740</td>
</tr>
<tr>
<td><strong>Total Construction Demand</strong></td>
<td>14,270</td>
</tr>
</tbody>
</table>

Source: Construction Industry Development Board

The outlook for the various property sectors is as follows:

#### 3.6.1 Residential Property Outlook

The market for residential property will depend a lot on the affordability of buyers. At current prices, the debt service ratios (DSR) have exceeded the conservative 30%. An increasing number of home buyers are being priced out of the private market. However, rents are expected to fall with the new supply coming on-line. Presently, developers are already responding to the oversupply and expected fall in rents by holding back on the release of new developments.

A careful study carried out by Vickers Ballas, a reputable and usually reliable retail brokerage firm in Singapore, indicates that the market will be oversupplied in the next few
years. Their forecasts on the market supply of private residential property and its effect on the occupancy rate are outlined in Table 10 below. Most property specialists in the market expect to see a rise in the vacancy rate because of the oversupply condition. Despite steady income growth, increase in household formation, low mortgage rates and growing CPF balances, the occupancy rate is estimated to fall to 84% in 1998, the lowest occupancy level since the recession in 1985.

Table 10: Forecast of the Private Residential Market

<table>
<thead>
<tr>
<th>End of Year</th>
<th>Demand No/ Units</th>
<th>Supply (nos./ units)</th>
<th>Occupancy Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(A)</td>
<td>(B)</td>
<td>(C)</td>
</tr>
<tr>
<td>End of Year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1994</td>
<td>72,524</td>
<td>78,012</td>
<td>93</td>
</tr>
<tr>
<td>1995</td>
<td>79,504</td>
<td>84,215</td>
<td>94.4</td>
</tr>
<tr>
<td>1Q-1996</td>
<td>79,647</td>
<td>85,846</td>
<td>92.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>End of Year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1996F</td>
<td>86,000</td>
<td>92,842</td>
<td>92.6</td>
</tr>
<tr>
<td>1997F</td>
<td>93,000</td>
<td>106,820</td>
<td>87.1</td>
</tr>
<tr>
<td>1998F</td>
<td>100,500</td>
<td>120,024</td>
<td>83.7</td>
</tr>
<tr>
<td>1999F</td>
<td>108,000</td>
<td>128,054</td>
<td>84.3</td>
</tr>
<tr>
<td>2000F</td>
<td>116,000</td>
<td>128,828</td>
<td>90</td>
</tr>
</tbody>
</table>

Note: data excludes the 44,891 private homes built before '74.
Supply (A) includes potential supply from homes under construction and those with written permission
Supply (B) = (A) plus those with supply that are granted the provisional permission to construct
Supply (C) = (B) plus planned sales of government sites and development proposals submitted for approval
(Source: Vickers Ballas Mthly Research June 96)

\[14\text{The figures indicated do not take into effect the new 2,000 units of executive condominium that are launched by the Government in July 1996. The occupancy rates could be lower with the additional supply of executive condominium.}\]
3.6.2 Commercial Property Outlook

Although there has been an overall increase in new office space supply, the availability of office space in the prime Central Business District (CBD) areas and the financial district has not increased sufficiently to cater for the anticipated demand from foreign companies which have relocated to Singapore. This demand is expected to push rents and capital values up steadily. Therefore, the prospects for commercial property remain relatively positive with further upside potential for rentals of properties located in the prime CBD and financial district areas.

3.6.3 Retail Outlook

The retail business has been performing poorly in the past two years because local disposable incomes have shrunk due to large commitments to home mortgages and car loans. Tourists and visitors to Singapore have found shopping in Singapore expensive because of inherent high costs and the strong Singapore dollar. The sluggish performance together with the additional supply of suburban shopping space will adversely affect retail properties, especially in the CBD, resulting in a rise in vacancy rates and a corresponding fall in rentals.

3.6.4 Industrial Outlook

As the manufacturing sector continues to become one of Singapore’s key growth sectors, the demand for industrial space will remain firm. New supply of private factory and warehousing space is expected to add to the existing stock, but as the newer industrial buildings are of better design, facilities and specifications, the rents are expected to rise marginally.
3.7 Investment Guidelines Applicable in Singapore

Real estate investors need to be aware of certain guidelines and regulations, as outlined below:

3.7.1 Property Tenure or Ownership

The ownership of buildings and that of land in Singapore are not separate. There are generally four types of land tenure: 1) Freehold Title or Fee Simple; 2) Estate in Perpetuity or Statuary Land Grants; 3) Leasehold Title for 30, 60, 99 or 999 years; and 4) Temporary Occupation Permits.

3.7.2 Stamp Duty and Legal Costs

Stamp duty is a government tax levied on documentation that involves property disposition or transfer of interest, e.g. Transfers, Mortgages, Tenancy Agreements, Assignments and Deed of Gifts. It is computed on the current market value of the property and is payable by the purchaser for every sale and sub-sale for any completed or uncompleted properties.

3.7.3 Property Tax

Property Tax is computed as a percentage applied to the annual value; the annual value being the gross amount expected to be derived from the lease/rental of the property annually. The tax rates are as follows:

1. A concessionary rate of 4% for owner-occupied residential properties. Other land and buildings are taxed generally at 13% of the annual value with effect from July 1st 1995.

2. Properties under rental or owned by investment companies are taxed at non-owner occupier rate.
3.7.4 Capital Gains Tax

With effect from May 15th 1996, a new ruling was passed that applied a tax on gains from sales of any properties within three years of acquisition. The tax schedule on capital gains is as follows:

1. Properties sold within the 1st year are taxable at: 100% of the capital gains
2. Properties sold within the 2nd year are taxable at: 66.67% of the capital gains
3. Properties sold within the 3rd year are taxable at: 33.33% of the capital gains
4. Properties sold after the 3rd year are tax-free

The capital gain tax is applicable to investors, real estate agents, real estate management and investment companies whose business is real estate investment, speculation or management.

3.7.5 Tax Depreciation

Except for qualifying industrial buildings, there is generally no tax depreciation benefits for properties in Singapore. Industrial buildings are allowed an initial depreciation of 25% and annualized depreciation allowance of 3% on the cost of construction only. The straight line depreciation method is used.
3.8 Conclusion

In view of Singapore's strong economic growth and low interest rates, real estate investment appears sound and should remain active, particularly in the commercial and industrial sectors. This trend is further fortified by Singapore’s political stability and currency strength vis-à-vis its neighboring countries.

As the demand for real estate investments from both domestic and foreign investors grows, other forms of investment vehicles should be studied and introduced so that a wider choice can be offered to these investors. In line with Singapore’s plan to become the financial hub of Asia, establishing a new investment vehicle such as a property trust fund that is based on the US’s Real Estate Investment Trust (REIT) may be beneficial to both the financial and the real estate industries in Singapore.

Based on the potential income growth and profit performance of the commercial and industrial sectors, the proposed property trust fund should invest mainly in these two sectors. So far, the residential and retail sectors do not seem like feasible sectors for a property trust fund to invest into because of their limited upside potential for rental growth and capital appreciation.
4. Real Estate Investment Trusts In The US

4.1 Overview

A Real Estate Investment Trust (REIT) is a corporation or a trust established for the benefit of a group of investors. A REIT is managed by one or more trustees who hold title to the assets of the trust and control its acquisitions and investments. REITs are like mutual funds because REITs provide investors with an opportunity to invest in a diversified portfolio of real estate that are managed by real estate professionals. REITs provide liquidity to its investors because the shares held are readily tradable in an over-the-counter market and on major stock exchanges.

4.2 Characteristics and Nature of REITs

The main characteristics of a REIT are as follows:

1. A REIT invests substantially in real estate.
2. Most of the REIT’s income is distributed to its shareholders.
3. A REIT is not taxed at the corporate level. Shareholders are taxed at the individual level.
4. A REIT is owned through transferable shares.
5. A REIT provides a mean for portfolio diversification.
6. A REIT has limited liability for the investor.
7. The majority of trustees or directors of a REIT are elected by the shareholders. They may not be affiliated with the sponsors of a REIT. In this way, potential conflict of interests are avoided.
4.2.1 Nature of REITs

The REIT regime was enacted by the Real Estate Investment Trust Act of 1960 which was codified into the Internal Revenue Code.¹ A REIT qualifies under certain tax provisions to become a pass-through entity that distributes most of its income and capital gains from the sale or disposition of its properties to its shareholders. In other words, a REIT can buy, sell, leverage and manage properties as a corporation but does not pay taxes at the entity level. Distributed dividend represents taxable income to its shareholders.

The qualifications of a REIT for tax purposes are as follows:

4.2.1.1 Organizational Requirements

1. The REIT must be a corporation, business trust or similar un-incorporated association.

2. The entity must file an election form with their tax return selecting the REIT status.

3. The entity must have a minimum of 100 shareholders for at least 335 days of a taxable year.

4. Beneficial interest in the REIT must be evidenced by certificates of beneficial interests or transferable shares.

5. Equity capital is raised through the issue of shares of stocks (in the case when the REIT is a corporation) or certificates of beneficial interests (in the case when the REIT is a trust). Not more than 50% of the REIT’s shares can be owned by five or fewer shareholders at any time during the last half of the year.

6. The REIT may be publicly traded or privately held.

4.2.1.2 Asset Requirements

1. At least 75% of the value of a REIT’s assets must consist of real estate assets, cash and government securities.

¹Internal Revenue Code: Section 856 through 860
2. Not more than 5% of the value of the assets may consist of the securities of any one issuer if the securities are not included under the 75% test.

3. A REIT may not hold more than 10% of the outstanding voting securities of any issuer if those securities are not included under the 75% test.

### 4.2.1.3 Income Requirements

1. At least 95% of the entity’s gross income must be derived from dividends, interest, rents or gains from the sale of creation assets.

2. At least 75% of the gross income must be derived from rents, interest on obligations secured by mortgages, gains from sales of certain assets, or income attributable to investments in other REITs.

3. Not more than 30% of the entity’s gross income can be derived from sale or disposition of stock or securities held for less than six months or real property held for less than four years, other than property involuntarily converted or foreclosed on.

### 4.2.1.4 Distribution Requirements

1. Distribution to shareholders must equal or exceed the sum of 95% of the REIT’s taxable income. To the extent that the distributions exceed a REIT’s earnings and profits, the excess is considered a tax-free return of capital.

### 4.2.1.5 Management Requirements

1. The REIT must be managed by one or more trustees or directors, who are usually elected by the shareholders.

2. In keeping with their fiduciary responsibilities, the trustees and directors should not be actively involved in the day to day management and operation of the REIT. Instead, they determine the REIT’s investment and business strategies.

3. Active management functions are carried out by professionals who are either internally or externally hired.
4.2.2 Advantages of REITs

- **Liquidity:**

  Like publicly traded shares, REITs have the advantage of liquidity that some investors will value especially when the market capitalization is sufficiently large.

- **Diversification:**

  REIT investors own shares in a portfolio of real estate that is diversified by property types and geographical locations. Hence, the investors' risks are also minimized.

- **Forward valuation**

  Valuation is determined by the market on a daily basis, based on current earnings and potential income of the property.

- **Access to Capital**

  Individual resources that are pooled together to acquire properties provide REITs with an easy source of equity capital. When investors are confident with the management's ability to maintain positive cash flows with good total returns, raising additional capital thereafter is also easier for the REITs.

- **Franchise Value**

  Investors can be assured that their investments will be managed by real estate professionals with relevant expertise and proven track records.
4.2.3 Disadvantages of REITs

- **Limited Control**

Investors in REITs do not have real control over the investment decisions compared to investors in a general partnership.

- **Little retained earnings**

Since REITs have to distribute 95% of their taxable income in order to meet the requirements for tax exemption, only a small portion of their earnings are retained. This may affect the growth potential of the REIT especially if it is unable to make any secondary offerings.

- **High Expenses**

Like most corporations, REITs have high operating expenses. This is because REITs need to hire skilled management and independent auditors together with investment analysts, who will monitor the REIT's performance. The costs involved in preparing annual reports to the IRS and SEC, are also high.

4.3 Type of REITs

There are three principal types of REITs: equity REITs, mortgage REITs and hybrid REITs. The equity REITs acquire property interest, while the mortgage REITs purchase mortgage obligations. Equity REITs own and operate properties of which the rent forms the bulk of their revenue. Mortgage REITs make loans to real estate owners and developers

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14Hybrid REITs have combined features of equity and mortgage REITs.
whereby the interest earned on these mortgages forms the REIT's revenue. Appendix 4A shows the composition for equity, mortgage and hybrid REITs.

Most REITs in the United States are equity REITs. Equity REITs that participate in joint venture developments are described as Development-joint venture equity REITs.\footnote{Real Estate Finance and Investments (9th Edition) by Brueggeman and Fisher, Irwin 1993, p. 698-701}

4.3.1 Development-Joint Venture Equity REITs

Typically, when one of the sponsors of a REIT is a developer who raises construction funds through the REIT, a partnership between the developer and the REIT is formed. Funds raised by the REIT in a public offering will be advanced to the joint venture partnership venture in stages, as according to the construction work progress. The risks associated with such REITs are derived from possible delays in construction and lease-up time periods. Since the risks are higher, the investors' returns are also higher.

Another way by which a REIT may participate in a development project in the US is through the purchase-leaseback transaction. In this arrangement, a REIT may buy land and lease it to the developers for development. This REIT may arrange to earn income from the land lease alone or it may also choose to earn a percentage of income from the development and in any sale of the project. The REIT could also arrange for the option to buy the property when the land lease expires. However, this arrangement would not be possible in Singapore because the ownership of private land and building cannot be separated as stated in Section 3.7.1.
4.4 Evolution of REITs

During the first REIT boom in the 1960s to 1970s, the mortgage REIT was the fastest growing segment. Those REITs provided funds to the riskier construction and development loans that conventional lenders avoided. During the recession period of 1973 to 1975, many of the built developments were not sold nor leased. Unable to collect interest payments from troubled developers, mortgage REITs made huge losses that affected the popularity of the entire REIT industry.

However, the situation started to change in the mid 80s when the Tax Reform Act of 1986 (TRA)\textsuperscript{8} was introduced. When TRA 1986 removed the incentive to maximize leverage, the benefits of raising debt capital with limited partnership and real estate syndicators were eliminated. Hence, equity became an important component to structure real estate deals and equity REITs became potential sources for such equity capital.

4.4.1 Proliferation of REITs in the US

Traditionally, real estate owners and developers raised capital for new projects, refinanced existing projects or made capital improvements for existing projects with loans from commercial banks, savings & loans, insurance companies and pension funds. Since the credit crunch period in the late 1980s, these traditional sources of capital were no longer readily available. Raising equity capital through limited partnership was also difficult when the real estate values started to fall in the mid 80s. The situation made both equity and debt financing difficult for real estate developers.

\textsuperscript{8}Tax Reform Act 1986 established passive activity loss rules and extended the depreciable life of real estate from 19 years to 27.5 or 31.5 years for residential and commercial properties respectively. As a result, the limited partnerships could not benefit from the tax shelter due to losses as they used to, before 1986.
During this same period of time, interest rates earned by investors on certificates of deposit and US Treasury issues were also declining drastically. These events led investors to seek higher investment returns elsewhere, which included REITs that offer upside potential. Consequently, there was a growing demand for REIT stocks. This demand continued into the early 1990s, as reflected in the increased number of REIT IPOs\(^9\) during 1993 and 1994. REITs also created value for the real estate owners by providing an arbitrage between what Wall Street investors would pay for real estate (in the form of stock) and what the Main Street would pay for real estate (in terms of real property).\(^{20}\)

In short, REITs became popular in the early 1990s because of the following four reasons:

1. Limited access to capital.
2. Higher returns from REIT stocks than from direct investment.
3. Strong performance on the initial wave of REIT IPOs.
4. Value creation to real estate owners.

### 4.5 Market Size

According to the National Association of Real Estate Investment Trusts, there were 183 tax-qualified REITs with a total asset of $43 billion by the year 1990. Of the 183 REITs, 110 were equity trusts, 41 were mortgage trusts and 32 were hybrid trusts. Of the 183 REITs, 107 REITs traded on the major stock exchange and their market value was $8.7 billion.

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\(^9\) IPO - Initial Public Offering.

In 1993, the market value of equity REITs more than doubled to nearly $26 billion. The total capitalization of all REITs (equity, mortgage and hybrid REITs) reached approximately $32 billion in that year.

By January 1996, the market capitalization of REIT was estimated at US $65 billion. At this amount, REITs comprise approximately 2% of the total value of commercial real estate in the US, which was valued within the region of US $3 trillion to US $4 trillion.

However, this explosive growth rate of REITs has recently reached a plateau. In 1996, the IPOs are expected to slow down significantly as the industry starts to consolidate. The consolidation of REITs will help eliminate poor management and achieve better economies of scale with larger REITs.

4.6 Valuation and Performance

4.6.1 Valuation

REIT share prices are determined by using a stock market valuation method, which is based on current and future earnings. Unlike the private market where the appraisal method of valuation tends to be backward-looking, REIT valuation is considered forward looking. This is an advantage to the investors who need up-to-date information for their diversification purposes.

The valuation analysis is based on the following criteria:

1. The underlying value of the real estate asset and its mortgages.

2. The potential total return on the REIT stock which is calculated on the basis of the anticipated price change and prevailing dividend yield.

3. The franchise value of the management team.
4. The growth potentials of the REITs as reflected in the funds from operations (FFO)\textsuperscript{11} per share.

4.6.2 Performance

REITs managed to achieve a 10.3% average annual return between the years 1978 and 1990. Equity REITs performed better by achieving a 13.6% annual return against mortgage REITs’ 5.3% annual return. During this period of time, REITs did not outperform the S&P 500 index (which achieved a 15.3% return) but their performance was close to the real estate-private equity’s performance of 11.0%, as outlined by the Russell-NCREIF Property Index.\textsuperscript{12}

When interest rates decline, investors who seek higher yield will want to look at alternate investment vehicles. This happened in the few years leading to 1994 when the interest rates declined. Equity REITs at the end of 1993 provided an average 6.8% dividend yield while the S&P 500’s yield and ten-year Treasury’s yield was 2.7% and 5.9% respectively. The total return for REITs was 18.7% compared with 10.1% for the S&P 500.\textsuperscript{21}

4.7 Key Elements for a Successful REIT Offering

The key elements to a successful REIT offering are as follows:

1. A real estate portfolio with consistent positive cash-flow and growth potential for earnings.

2. A team of professional management which has a proven track record coupled with highly specialized skills in real estate investments.

3. A professional management that is compensated based on yield performance.

\textsuperscript{21} FFO is net operating income (or loss) before property depreciation, amortization of financing and other non cash items. FFO do not represent cash flow from operations as defined by GAAP and is not indicative of cash available to fund all cash flow needs.

\textsuperscript{22} "National Association of Real Estate Investments Trusts," REIT Sourcebook" 1991 p.21-23

4. Self management and self administration.

5. Market capitalization large enough to provide sufficient trading liquidity.

6. A debt to equity ratio that does not exceed 40%.

7. A fixed rate debt preferred over variable debt.

8. A high dividend pay-out ratio that ranges from 80% to 90% of the FFO.

4.8 Conclusion

In the US, REITs offer an attractive alternative to individual and institutional investors who were ‘burned’ by direct real estate investments during the late 1980s and early 1990s. They provide a much more transparent way to own real estate since they are priced daily and their performance is reported quarterly. Regardless of the slowdown in recent IPOs, REITs will be seriously considered by many investors because real estate fundamentals have improved over the past five years. In short, REITs are attractive in the US because they provide high absolute yield with growth potential, a spread above US Treasury, liquidity, easy access to capital and quality management.
5. Property Trust Funds In Singapore

5.1 Overview

Generally, local real estate developers have been raising debt capital through commercial banks and finance companies. Riding on the strong economy and real estate boom, these local developers are performing well and do not face any funding difficulties.

However, recent changes introduced by the Government as mentioned in Section 3.6 have affected the activities and profitability of real estate companies. These anti-speculation measures, while stabilizing short-term real estate prices, have also slowed down the property market since the second quarter of 1996.

In achieving the Government’s goals, the new rulings have dampened investors’ zeal in real estate investment. Since most local investors are used to making quick capital gains, they have, in the midst of these new circumstances, adopted a ‘wait & see’ attitude in anticipation of further falls in property prices.

The chapter explores the possibility of establishing property trust funds as an alternate form of real estate investment vehicle, as well as a cheaper source of funding for real estate companies in Singapore.

5.2 Historical Development of The Unit Trust Industry In Singapore

A unit trust is a financial institution created by a trust deed for the purpose of pooling the funds of investors in order to invest in securities. It is essentially a tripartite arrangement among the investors, the fund manager and the trustee. In Singapore, the Registrar of

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Companies is the authority that grants approval to trust deeds. Unit trusts are regulated by the Trustees Act and specific provisions made in Part IV Division 5 & 6, the Seventh Schedule and Section 88 of the 1967 Companies Act.

Unit trusts were first introduced in Singapore with the launch of the First Singapore Fund in November 1959. In the early days, the unit trusts in Singapore had investments mainly in industrial shares such as tins, rubbers and oil palms that were listed on the Malaysia and Singapore Stock Exchange. Their investment in properties totaled to less than 0.5% of their total investments. The First Singapore Fund performed well with an average 30.25% per annum return over its life span, based on capital appreciation and total gross dividend income. As of December 1994, there were 40 unit trust funds in Singapore, most of which were open-ended funds.

5.3 Unit Trusts versus Mutual Funds

The main difference between the Unit Trust and the Mutual Fund is in their organizational structure and set-up requirements. In a unit trust, a management company is required to enter into a Trust Deed with the Trustee company to provide for the interests of the unitholders. The open-ended Mutual Fund on the other hand, is set up by single investment company that usually employs an external advisory company to advise on the management of the portfolio. Both Unit Trusts and Mutual Funds operate on the same

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25 First Singapore Fund was formerly known as First Malayan Fund. It was started in November 1959 at SGD $1 per unit and matured on 30th June 1970 at SGD $2.61 per unit based on the buying price at 30th June 1970.

26 Mutual Funds and Unit Trusts: Their Role and Regulation by F. Yeo Teng Yang for the Economics Development Division, Ministry of Finance, Singapore- August 1970.
concept where capital is pooled from a large number of individuals or institutions through initial offering and continual share issues.

The unit trust fund industry in Singapore is modeled after the British unit trusts as opposed to the American mutual fund because of the following reasons:

1. The Trustee company will supervise the Management company to ensure that all transactions carried out will be done as according to the Trust Deed. This arrangement provides additional protection to the investors that is absent in the Mutual Fund organization.

2. The legal framework required to set up unit trusts is already present in Singapore. Although the industry is still relatively new and less developed compared to the stock industry, there exists a certain level of familiarity among the Authorities that will enable easier administrative and legislative regulation.

3. The Mutual Fund mode of operations is comparatively more complex than the unit trust. With limited presence in Singapore, the lack of familiarity on their operations and legislative regulation will make control ineffective.

5.4 Performance of Unit Trust Industry

As of July 1996, there is approximately SGD $2 billion invested into various unit trusts. Since 1993, most of the funds have not been able to outperform the market. Only a few of the growth funds have been able to give their investors a three-year 40% to 48% return while most others have provided only a three-year 1.16% to 1.5% return. When the returns are recalculated on a two-year basis, the better performing fund’s return would have whittled down to a range of 2.6% to 14.5%. Wide variation in returns is due to the fact that several of

27 "Bull Run Funds Lose Their Puffs"- an article on Unit Trusts by Louis Beckerling: Singapore Business July 1996
the funds were launched at or near the top of a stock market cycle rather than at the bottom.

Performance of some unit trusts are shown in Appendix 5A.

According to some industry sources, the reasons for the overall poor performances are due to 1) poor selection of portfolio mix; 2) a highly volatile environment; 3) currency depreciation; and 4) poor timing.

5.5 Reasons for Introducing Property Trust Funds In Singapore

5.5.1 New Investment Vehicle

- *Low Capital Requirements*

As mentioned in Section 2, there are presently two methods by which local investors can choose to invest into real estate. The first method is to invest in stocks of public listed real estate companies while the second is to buy property directly. Investing in good grade commercial properties requires high capital outlay. Hence, only institutional, corporate investors and very rich individual investors may participate. Small individual investors who cannot meet the high capital requirements are limited to investing in stocks of the public listed real estate companies.

- *Low Investment Skills Required*

With the property trust funds, small individual investors can invest into real estate without highly related investment skills. The risks faced by investors due to stock-picking and also, the risks associated with the ‘buy and sell’ timing of the stocks are minimized since property trust funds are professionally managed.

- *New Investment Sectors*
With the property trust funds, investing into commercial properties will become more accessible. Hence, small investors can also look forward to investing into wider sectors of real estate.

To illustrate the point, the latest prime grade commercial complex called Suntec City Developments (Tower 2) with a total area of 473,620 sq.ft. was sold on a floor to floor strata-basis in the first quarter of 1995. The price ranged between SGD $1,460 to $1,740 p.s.f. while the floor sizes ranged between 7,800 to 14,380 sq.ft. At such prices, small investors cannot afford to invest directly. To acquire centerpiece buildings, the property trust fund also has to be large enough with at least a SGD $500 million market capitalization. Property trust funds should not buy strata-titled commercial properties because it is not cost effective and administratively inefficient to manage parts of several buildings.

- **Diversification Benefits**

A large trust fund that has investments consisting of various property types located in different real estate markets within the region may benefit from the different economic growth rates of the emerging markets in the South East Asia region. Thus, the trust fund will be able to offer diversification benefits to unitholders. Furthermore, unlike investing directly into properties, the unitholder’s liability is limited to the amount that they have subscribed. Unlike investing into stocks of real estate companies, unitholders face a lower risk of losing their share value in the event when the corporation goes bankrupt.
5.5.2 New Source of Capital

- Limiting Banks' Exposure To Real Estate

The banks in Singapore have to be more prudent in their lending patterns so that they are not over-exposed to real estate. According to Part V, Section 39 (1) of the Singapore Banking Act (Chapter 19), loans or advances made by a bank shall be not exceed 30% of its deposits in Singapore on the security of immovable property for the purpose of purchasing, improving or alteration of the immovable property. Real estate loans are long-term assets while the saving deposits are short-term liabilities to the banks. In needing to match their assets and liabilities, banks may not be able to accommodate all the capital requirements of Singapore’s real estate companies. Table 11 below shows overall bank exposure to various sectors, where the exposure to property and construction is clearly significant.

Table 11: Bank Loans and Advances to Non-bank Customers by Industry (1985-94) in S$ millions

<table>
<thead>
<tr>
<th>Year (End of Period)</th>
<th>1985</th>
<th>1987</th>
<th>1989</th>
<th>1991</th>
<th>1993</th>
<th>1994</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Loans and Advances including Bills Financing</td>
<td>37,403</td>
<td>37,869</td>
<td>50,786</td>
<td>64,009</td>
<td>78,454</td>
<td>90,974</td>
</tr>
<tr>
<td>Agriculture, Mining &amp; Quarrying</td>
<td>147</td>
<td>111</td>
<td>79</td>
<td>97</td>
<td>106</td>
<td>120</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>5,669</td>
<td>6,141</td>
<td>7,433</td>
<td>8,123</td>
<td>8,353</td>
<td>8,856</td>
</tr>
<tr>
<td>Building &amp; Construction #</td>
<td>7,997</td>
<td>7,669</td>
<td>10,903</td>
<td>15,578</td>
<td>23,113</td>
<td>28,213</td>
</tr>
<tr>
<td>General Commerce</td>
<td>10,105</td>
<td>10,729</td>
<td>12,386</td>
<td>15,695</td>
<td>17,733</td>
<td>19,443</td>
</tr>
<tr>
<td>Transport, Storage &amp; Communications</td>
<td>1,183</td>
<td>819</td>
<td>1,081</td>
<td>1,817</td>
<td>1,838</td>
<td>1,902</td>
</tr>
<tr>
<td>Financial Institutions</td>
<td>5,659</td>
<td>5,282</td>
<td>8,432</td>
<td>10,318</td>
<td>13,133</td>
<td>13,644</td>
</tr>
<tr>
<td>Professional &amp; Private Individuals</td>
<td>4,286</td>
<td>4,642</td>
<td>6,981</td>
<td>8,290</td>
<td>9,353</td>
<td>13,786</td>
</tr>
<tr>
<td>Others</td>
<td>2,356</td>
<td>2,477</td>
<td>3,491</td>
<td>4,092</td>
<td>4,827</td>
<td>5,010</td>
</tr>
</tbody>
</table>

Note: All data on bills financing include bills refinanced by discount houses and the Monetary Authority of Singapore. Discount houses ceased operations in May 1987. # includes building and building co-operative societies, building developers, real estate agents and housing loans. (Source: Department of Statistics)

28 Banks whose principal business is in making loans or advances connected to purchasing, improving or alteration of immovable may make loans to a limit of 60% of their deposits in Singapore, provided written consent from MAS is granted.
Changing Market Conditions

MAS has controlling power over the banks in Singapore on their limit for any category of loans, advances or investments. The MAS also determines from time to time, the interest rates payable to or payable by banks. Therefore, it is not wise for non-listed real estate companies to rely too heavily on commercial banks as their source of funding. Appendix 5B lists the total amount of loans made for the property sector, by banks and finance companies, respectively. Appendix 5C tracks the change in prime lending rates and deposit rates over the last ten years.

Encourage New Forms Of Investments

Property trusts will not be able to make loans to real estate companies but as mentioned in Section 4, they can participate in joint venture programs with developers. New forms of investments can be created for real estate companies when capital can be tapped from small investors.

Re-Channeling Savings

Japan has fostered the growth of Unit Funds as a medium to channel households' savings into investments in local industry. Similarly, property trust funds will enable more savings to be reinvested into the property stock to support its buoyant state in Singapore. This is possible if the Central Provident Fund (CPF)\textsuperscript{29} extends its list of approved investible trusts funds to include property trust funds. Under the CPF’s Approved Investment Scheme (May 1986), CPF savings may be used to purchase

\textsuperscript{29}Central Provident Fund is a compulsory social security savings scheme to which both employers and employees have to contribute 20\% of employees gross salary each.
publicly listed shares and loan stocks that have been designated as trustee stocks, unit trusts and gold. Currently, a minimum sum of SGD $30,000 must be maintained by all CPF members in their CPF accounts and unitholders can invest up to 20% of the remaining balance into approved unit trust funds.

5.5.3 Real Estate Market Efficiency and Liquidity

- Information Efficiency

As Singapore aims to become the financial hub of the South East Asia region and a world class financial center, the capital market must improve. Improvement is required to provide a wider range of financial services and financial products with lower entry barriers and more importantly, information efficiency.

The current state of the real estate private market is not efficient because investments are made based on market valuation, which in turn is based on the track records of comparable properties transacted most recently. This appraisal method is backward looking as it relies on past records, and because of its nature, the private market will fail to capture the future value of any property, especially during market boom periods when the prices are inflated due to great demand.

The public market valuation is thus diverged from the private market valuation. For example, share prices of REITs in the US are determined using the stock market valuation method that is based on the current and future earnings of the investment trusts. Likewise, a property trust’s income is derived from the rentals of tenanted properties and the capital gains made from future disposition of the properties. Since
most of the leases are fixed for long terms, the rentals indirectly reflects the future market valuation of trust units. Thus, unit trusts pricing will reflect the future prices of the real estate market. Property trusts make the real estate market more efficient because price information on the unit trusts traded on the secondary market is more easily available.

- **Leading Economic Indicator**

In the US, public market stock prices tend to lead private market real property prices and stock prices generally hit their high points in the middle of a general economic expansion and they also tend to move downwards in advance of an economic recession. Private market real estate prices tend to coincide with the peaks and troughs of general business cycles. This is why stock prices are considered a leading economic indicator in relation to the general business cycle.10

In theory, the share price should reflect all the information currently known about the potential earning capability of the company. However, the listed real estate companies in Singapore are not entirely in the property business alone. Some listed companies have other side businesses that relate to the real estate industry such as construction materials. Therefore, their stock prices do not only reflect the value of their property portfolio but the value of their other businesses, as well. In addition, the listed real estate companies in Singapore normally do not hold their residential developments on a long-term basis when compared to their commercial and hotel developments.

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Consequently, any heavy reliance on the performance of the listed real companies as a yardstick to measure the real estate market conditions may be skewed.

- **Better Liquidity**

  In terms of liquidity, property trusts provide unitholders with a lot more flexibility to buy and sell property on the secondary market. Direct investments are less liquid because a whole property has to be sold as one. Consequently, it takes time to find the correct buyer with the right offer.

5.5.4 **Stabilizing the Real Estate Market**

- **Demand and Supply**

  Real estate is a highly cyclical market because it is driven mainly by the demand and supply factors whose paces normally do not coincide. When the economy is good and businesses are performing well, the demand for properties will rise. However, this demand is often not immediately met by supply because property, being a fixed physical asset, requires time for construction.

  When demand expands at a much faster pace than supply, it becomes difficult to estimate potential absorption rates. The lack of any sophisticated method to project future absorption rates and the inability to slow down construction once it has started, will most likely lead to an oversupply situation.

  Under such market conditions, the prices of prime area properties may hold but prices of other properties in the fringe and outskirts areas will normally be adversely affected. Property trusts can help to stabilize this type of situation because they have the capital
to acquire prime properties for medium-term to long-term holding. Hence, they can
create a long-term demand for real estate. The demand created by property trusts can
boost the market conditions, as long as the local and world economy is stable and
growing. In other words, property trust funds can act as moderators against the
cyclical nature of Singapore's real estate market.

5.5.5 Investment Protection for Real Estate Investors

- Long Term Stable Income Returns

Recent years have witnessed a sudden increase in the number of local real estate
investors and developers seeking quick capital gains from the rapid pace of capital
appreciation. These investors are less interested in income gains because they are
highly leveraged and cannot afford to hold on to their properties for too long.

Following the Government's anti-speculation measures, these investors may change
their perspectives on real estate investment and look towards investing into property
trust funds that provide them with long-term earnings stability at minimum capital
outlay.

- Management Expertise

Property trusts offer another form of protection to investors. With better access to
information, management is able to capture more investment opportunities with
potential upside for the small and medium size investors.

- Aligned Interest between Trustees and Unitholders
Unitholders are assured that the trust management will act to their best interest, on account of the strict investment guidelines drawn by the Board of Trustees by which management has to abide. Unitholders are kept fully informed of any deviations. Compared to listed real estate companies, property trusts have a better setup to protect the investors' interests.

5.5.6 International Flow of Funds

- Increased Foreign Investments

Property trust funds may serve as an avenue by which the international flow of funds into this region may be tapped especially now that there is a keen interest among US and European investors in the emerging markets like Singapore. Besides being more liquid, foreigners would also feel more comfortable investing passively through trust funds instead of direct active investments which call for highly localized property management and investment skills.

With a steady inflow of foreign capital, funding for higher quality income-producing properties will become more accessible. This in turn will cause a proliferation of investment grade properties that will enhance the overall quality of property stock in Singapore and encourage further improvements in property management skills.
5.6 Types of Trust Funds and Investment Options

There are basically two types of funds: open-ended and close-ended funds. These are described below.

5.6.1 Open-Ended Funds
1. The number of units offered is not final. Units are created and sold when the trust requires additional capital for new investments.
2. Shares are highly liquid, at daily posted prices.
3. They are mostly unlisted and usually managed by commercial banks. They tend to have high management fees.

5.6.2 Close-Ended Funds
1. The number of units offered is limited and the total dollar amount of capital raised for investment is fixed.
2. Their units are less liquid because managers are not required to redeem units. However, a secondary market can be created when the close-ended fund is listed on the stock exchange. This will help improve liquidity.
3. They are usually listed on the stock exchange and management fees are lower than the fees of open-ended funds.

In setting up a property trust fund in Singapore, close-ended type should be selected. This is because the characteristics of open-ended funds such as redemption within short time periods and at uncertain frequencies, are very difficult to handle since real estate is illiquid, requires heavy capital outlay and has relatively lower transaction volumes than stocks.
5.6.3 Investment Options

Three types of investment options may be offered by property trusts in Singapore:

- **Ordinary Units**: Return reflects a balance of income and capital gain.

- **Income Units**: Return is predominantly income.

- **Growth units**: Return is predominantly capital gain

As mentioned in Section 3, the real estate prices of the various sectors in Singapore are currently very high. Hence, growth units would not provide very attractive returns in the short to medium-term unless market prices fall. Rental returns for commercial and residential properties each average about 4% per annum. Commercial property fetches better rental than residential property, hence a property trust fund that invests totally or mostly in commercial properties will yield relatively better income returns.

The lack of capital appreciation opportunities can be remedied by including prime grade properties of neighboring countries into the fund’s portfolio, after careful assessment of their price appreciation potential in the foreseeable future.

5.7 Advantages and Disadvantages of Listed and Unlisted Trust Funds

A property trust fund in Singapore may opt for listing or otherwise. The advantages and disadvantages of both categories are compared below:
5.7.1 Listed Property Trust

5.7.1.1 Advantages:
1. Progress of the trust fund together with information on the selling price of units and volume traded etc., can be monitored on a daily basis
2. Brokerage fees will only be charged when buying or selling
3. Yields from listed property trusts are generally higher
4. Better risk diversification since the portfolios tend to be larger

5.7.1.2 Disadvantage:
1. The underlying assets of the trust are usually properties with stable long-term leases, and as such, the unit trust’s prices should be sensitive to the real estate market, and not the stock market. However, under volatile stock market conditions, there is no guarantee that the prices of unit trusts would not be affected by heavy trading.

5.7.2 Unlisted Property Trust

5.7.2.1 Advantages:
1. Portfolio may not be smaller in size but diversification is achieved by more variety in property types and geographical locations.
2. Leveraging for properties with potential capital growth

5.7.2.2 Disadvantages:
1. High management fees charged at the up front and are generally higher than listed funds.
2. Previous records are not available for constant valuation. Valuation is done periodically instead.

5.8 Structure of the Property Trust Fund

In order to set up a property trust fund in Singapore, the following elements have to be present for its successful establishment:
5.8.1 Trust Deed

The Trust Deed sets out the investment policies for the managers to follow and the Trustees to monitor. For example, it sets out guidelines on the calculation of unit prices, the type of investible properties and possible fee structures chargeable by the fund management. Provisions made under the Trust Deed will be continually reviewed by the Trustee and the Management team to ensure that the investment guidelines and regulations are appropriate and relevant.

5.8.2 Trustees

The trustee’s role is to hold legal title to the assets of the trust fund. It also has the fiduciary responsibility to regulate and monitor the management actions to ensure that all actions are taken as according to the guidelines. In the US, trustees are considered independent because they usually have no personal and business relationship with REITs.

5.8.3 Management

The management company has the responsibility to promote the property trust scheme, to issue the prospectus for the scheme and to undertake obligations under the trust deed to select investments and manage the trust’s assets. It will keep the accounting records and prepare performance reports to unitholders on a periodic basis. For their services, management is paid an up front management fee (5%) and an annual management fee (1%).

A REIT in the US can be self-administered and advised by its internal professional employees or, it may hire an external advisory firm to carry out the management work. In Singapore, there is a general lack of real estate professional managers having in-depth fund management expertise. Therefore, to set up a property trust fund would require a management
team with an internal fund management personnel and a hired external property management company.

5.8.4 Sponsors

In the US, REIT sponsors are typically real estate owners, developers, banks, insurance companies and property management companies that will exchange their property for unit certificates in the REITs or for cash.

In Singapore, the sponsor can also be from any of the above mentioned categories of real estate investors, provided always, that the property trust fund is not treated as a 'dumping ground' for developers to dispose of their under-performing properties. In fact, the property trust fund can be successful only if prime grade real estate are securitized in the capital market. Similar to the REITs in US, prospective property trust funds in Singapore should maintain a minimum of 75% of their assets in real estate. With this restriction, the trustee and management would have to be more selective in their choice of real estate investments so as to maintain steady income returns for their unitholders.

5.8.5 Appraisers

Normally, a property's current and potential income stream is analyzed before a REIT purchases a property. The income stream will then be capitalized at the appropriate capitalization rate in order to determine the property value. The same Discounted Cash Flow method is used in Singapore by licensed appraisers. However, in the interest of the property trust fund, all appraised values done internally should be reconfirmed by external appraisers who are approved members of the Singapore Institute of Surveyors and Valuers.
5.8.6 Auditors

The fund’s accounts will have to be audited by licensed auditors approved by the authorities and their reports submitted to the Monetary Authority of Singapore (MAS), the Stock Exchange of Singapore (SES) and the Inland Revenue Department.

5.9 Prospects of Developing Property Trust Funds in Singapore

To analyze the prospects of developing property trust funds in Singapore, the four factors that contributed to REIT’s proliferation in US are re-examined here and then compared to Singapore’s current state.

- Limitation on Capital Funding

Singapore is not in a credit crunch situation. The commercial banks and finance companies are still aggressively making loans for property investments. Furthermore, investors generally have a lot of savings for their investments. Table 12 below shows that Singapore has one of the world’s highest savings rate in 1991.

Table 12: Savings Rates in Asia: Percentage of GDP/ GNP

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage %</th>
<th>Country</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>42.8</td>
<td>Thailand</td>
<td>28.7</td>
</tr>
<tr>
<td>South Korea</td>
<td>36.2</td>
<td>India</td>
<td>22.5</td>
</tr>
<tr>
<td>Japan</td>
<td>33.6</td>
<td>Australia</td>
<td>21.1</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>33</td>
<td>New Zealand</td>
<td>18.4</td>
</tr>
<tr>
<td>Indonesia</td>
<td>31.4</td>
<td>Philippines</td>
<td>17.2</td>
</tr>
<tr>
<td>Taiwan</td>
<td>30.8</td>
<td>United States</td>
<td>15.1</td>
</tr>
<tr>
<td>Malaysia</td>
<td>30.6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: East West Pendulum
Investors in Singapore have enjoyed very high capital appreciation in the recent years and although prices have come to a plateau now, many still believe that foreign demand will continue to push up prices of commercial properties in the near future. However, the case may be different for residential properties. Based on Vickers Ballas’s projected figures (as mentioned in Section 3), the outlook of an oversupplied residential market is likely to occur in the near future. From this perspective, capital appreciation for residential property may be limited in the near future. Therefore, value creation to real estate owners in Singapore will be limited to selected property sectors, namely the commercial and industrial property. As such, the situation cannot be compared to the US market when value creation was achieved across all property sectors.

**REITs offer higher returns than direct investments**

Singapore investors are generally not accustomed to trust fund investments. The interest and response to unit trusts have so far been moderate at best. The same reaction may be expected for property trust funds because local investors are inclined to have direct control over their investments, be it stocks or property. Therefore the concept of investing through a fund manager has had limited appeal to most investors. Hence, it is not surprising that direct property investments have continued to be very popular despite the required high initial capital outlay. Furthermore, unit trusts in
Singapore have not been performing very well in recent years when compared to stocks.

- **Strong performance on the initial wave of REIT IPOs**

  Initial public offerings on most Singapore stocks have been heavily over-subscribed in the last three years. However, there has been no precedence of similar strong performance with regards to unit trusts in Singapore because they are mainly open-ended and unlisted.

  It is clear that the current market conditions in Singapore are not the same as those in the US in the early 90s, and so the establishment of a property trust fund in Singapore today will not see the same rate of growth as witnessed in the US.

### 5.10 Problems and Obstacles - Existing and Potential

The following are existing and potential problems that may hinder or delay the introduction of property trusts in Singapore:

#### 5.10.1 Legal and Regulatory System

The existing unit trusts in Singapore do not invest directly into property themselves but merely invest in public listed real estate companies in Hong Kong, Taiwan and Singapore. To establish a property trust fund, existing laws and regulations need to be changed and approved by MAS and SES.

For example, legislation must have provisions for regulatory institutions such as the Association of Unit Trust Managers in the US and the National Association of Security Dealers in the UK to take on the responsibility of enforcing legislative controls on fund
managers to counter fraudulent acts by fund managers." By comparison, the 1967 Companies Act and Trustees Act in Singapore at best can provide only minimum safeguards to unitholders against fraud.

5.10.2 Tax System

Presently, designated unit trusts are not taxed at the trust level. To establish a property trust fund successfully, tax exemption should be considered so that the property trust fund can generate attractive returns for its unitholders.

The notion of diversifying risk by a geographically diversified portfolio works beautifully in theory, but in practice extremely difficult to execute because of the different and varying tax legislation systems of the countries in South East Asia. Unless the tax systems and other legal requirements relating to setting up a property trust fund are standardized across borders, fund managers will not find it easy to efficiently manage investments under such conditions. In the United States, the tax laws are clearly defined with a working two level system: the Federal Tax and the State Tax.

5.10.3 Professional property management

There is still a general lack of professional property managers that are well equipped to understand real estate finance in depth. Skills in investment research, risk analysis and fund management need to be further developed to complement property management skills.

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31Mutual Funds and Unit Trusts: Their Role and Regulation- by F. Yeo Teng Yang
5.10.4 Investor Unfamiliarity with Property Trust Funds

The income stream and long-term capital growth of a property trust fund will depend on the type of properties that are included in the portfolio. When the performance of the various properties sectors are not positively correlated with one another, the risks of the trust fund can be better diversified. By studying the rental values in the past five years, the commercial, industrial and residential property in Singapore are currently positively correlated while retail property is less correlated (see Appendix 5D). Therefore, diversification benefits may not be fully achieved at current market conditions.

Furthermore, the prices of the underlying assets will be sensitive to investor sentiments especially since the Singapore market is relatively volatile, and investors are less sophisticated and highly speculative in nature. Investors in Singapore need to understand that the underlying assets are property and not stocks before they can appreciate a long-term view on property trust funds. In addition to that, the property trust fund should also have at least 100 shareholders in order to curb large movements of the units. A limit on the number of units that can be controlled by large institutions must also be proposed.

5.11 Conclusion

REITs are important investment vehicles for the development of the real estate industry in the US because they facilitate the mobilization of funds for property investment. The same concept may be adopted by and applied to Singapore’s real estate and capital markets despite existing problems and obstacles that are not insurmountable.
These problems may deter the establishment of property trust funds in the short-term but with the Government's drive to establish more unit trusts in the medium to long-term, Singapore may attract more international funds. The recent launch of the United Global Capital Fund by United Overseas Bank Asset Management (UOBAM) in Singapore that invests mainly in banks and other financial institutions in the regional and global markets, supports the fact that the unit trust business is a growing sector in the financial industry. It is also a step in the direction of establishing specialized unit trusts like property trust funds.
6. Conclusions and Recommendations

The demand for real estate investments in Singapore has grown tremendously as the real estate market boomed in the last four years. Consequently, the number of local and foreign investors interested in properties located in this region has increased significantly.

Still, most of these investments belong to the traditional types of private equity and private debt investments, namely direct property investments and mortgage investments respectively. Rarely is the capital market fully utilized for advancing and maximizing real estate investment opportunities.

Real estate securitization using REITs and Commercial Mortgage Backed Securities (CMBS) are still unfamiliar investment vehicles in Singapore’s real estate investment market. Still, there is a case to be made for establishing property trust funds in Singapore, and the following three reasons explain why this case is a strong one.

Firstly, there is a need for alternative real estate investment vehicles in Singapore, as concluded in Section 3.8. The property market size in Singapore is relatively small and the cost of investment extremely high. The strong demand has pushed real estate prices to levels that are clearly unsustainable in the long-term. The holding cost in the residential sector is even negative. As direct investment becomes more costly, small investors will try to seek out new investment vehicles that require less capital outlay. A property trust fund will allow small investors to benefit from increased liquidity, risk diversification, limited liability and access to new investment sectors.
The second factor is that property trust funds will create new depth in the real estate market. They are a new source of capital that can be used in the financing of good quality property stock as well as facilitate the development of property fund management expertise in Singapore. As mentioned in Section 4.8, REITs provided US investors with a more transparent way to own real estate. Likewise, the property trust fund is a more transparent way for investors to own real estate rather than just owning the shares of publicly listed real estate companies.

The third factor is that property trust funds can stabilize the real estate market. As mentioned in Section 5.5, the long term leases coupled with the long-term investment strategies of property trust funds can help stabilize the real estate market and shield it from short-term volatility.

During the next decade, the developing countries of the Asia Pacific region will continue to experience high GDP growth, and with that invariably follows appreciating real estate values. Realizing this opportunity, a growing number of private funds have been established by foreign investors in recent years, and often use Singapore as their operating base because of its superb infrastructure and stability. For example, in February 1995, a private real estate investment vehicle called The South East Asia Property Company (SEAPAC) was set up to acquire property investments in the region. Managed by GRA Singapore, the fund is a private fund, set up to invest up to US $250 million in the South East Asian equity real estate. The five shareholders of the fund are: The Prudential; The Australian Mutual Provident Society; Nationale-Nederlanden (part of ING Group); The Abu Dhabi Investment Authority and The State Superannuation Investment Management Corporation.
The establishment of this and other investment funds in Singapore is a clear signal that there is keen foreign interest wanting to invest into the regional property markets. It follows therefore that the prospects for establishing property trust funds in Singapore are promising since there is, firstly, keen domestic and foreign interest in regional real estate investment, and secondly, the potential availability of a very large pool of foreign funds to tap into.

As part of this thesis, a survey was conducted over a period of a month to solicit views and experiences from a select group of industry experts on the subject matter. Fifty surveys were sent out and twenty replies were received. A majority of those surveyed (60%) thought that property trust funds would be useful to the real estate market because it provides an alternative form of real estate investment. Some (30%) saw the property trust fund more as a way by which small investors can invest into real estate. However, only a small group (10%) of those surveyed thought of the property trust fund as a new source of capital.

The potential benefits as well as the obstacles associated with the establishment of property trust funds in Singapore were discussed in Sections 5.5 and 5.10. One important area of consideration is that the market size of investment grade properties in Singapore is very small. Hence, the property trust fund’s portfolio should include properties within the South East Asia region in order to achieve a larger-size fund with better risk diversification possibilities. Real estate risk is mitigated by diversifying the real estate portfolio across property types, geographic location and even investment periods.

Based on the research and thinking carried out on this thesis, and the views and issues raised by the numerous real estate professionals with whom I interviewed or surveyed, my final
recommendation would be that property trust funds be established in Singapore. However, to ensure success, the following conditions must be carefully considered.

1. To establish a property trust fund, the timing is very critical. As explained in Section 4.8, Singapore property prices are at their peak now and therefore, prospects for capital appreciation are very limited. As growth potential is one of the key elements for a successful REIT offering, the property trust fund should not be established at current market conditions. Perhaps a property trust fund that is being started now should explore regional properties that have greater upside potential. The property trust fund must be established at the right instance in order to maximize unitholders return on capital while capitalizing on the growing economies of the South East Asia countries.

2. As an unlisted fund will exclude the participation of small investors and thus deny them the opportunity to diversify their real estate portfolios, the property trust fund should be a listed close-ended fund. Unfortunately, to qualify for public listing in Singapore, the fund needs to have a minimum track record of five years with a cumulative pre-tax profit of at least SGD $7.5 million in the last three years. Therefore, when the fund is initially established, it should invest in prime-grade properties with good rental return so that it can build up a steady cash flow and track record.

3. The fund should be tax exempted in order for it to offer returns that are at least as attractive as the returns of existing unit trusts which are taxed exempt. To facilitate this, legal and regulatory changes are clearly called for. In addition, CPF’s approval may be sought to give local investors the option to invest their CPF savings into the fund.
As mentioned earlier, local investors are generally unfamiliar with the concept of unit trusts and fund management. Coupled with the unremarkable returns of unit trusts in general, property trust funds may seem to face an uphill task of getting established.

Still, time will shape the market. As unit trusts performance improves with time, investor confidence towards them will grow. In the meantime, effort should be spent in setting the stage for the establishment of property trust funds by addressing the many issues stipulated above and in this thesis.
## APPENDIX 2A: TOP BANKS IN EAST & SOUTHEAST ASIA

<table>
<thead>
<tr>
<th>Country</th>
<th>1990 rank</th>
<th>Name of Banks</th>
<th>1990 Assets (US $billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hong Kong(2)</td>
<td>28</td>
<td>Hong Kong &amp; Shanghai Bank</td>
<td>148.5</td>
</tr>
<tr>
<td></td>
<td>153</td>
<td>Hang Seng Bank</td>
<td>27.6</td>
</tr>
<tr>
<td>Indonesia (3)</td>
<td>322</td>
<td>Bank Negara Indonesia, 1946</td>
<td>11.8</td>
</tr>
<tr>
<td></td>
<td>342</td>
<td>Bank Rakyat Indonesia</td>
<td>10.9</td>
</tr>
<tr>
<td></td>
<td>440</td>
<td>Bank Dagang Negara</td>
<td>8.3</td>
</tr>
<tr>
<td>Japan (104)</td>
<td>1</td>
<td>Dai- ichi Kangyo</td>
<td>428.2</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Sumitomo bank</td>
<td>409.2</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Mitsui Taiyo Kobe</td>
<td>408.8</td>
</tr>
<tr>
<td>Korea (10)</td>
<td>95</td>
<td>Bank of Seoul</td>
<td>54.2</td>
</tr>
<tr>
<td></td>
<td>155</td>
<td>Commercial bank of Korea</td>
<td>27.4</td>
</tr>
<tr>
<td></td>
<td>157</td>
<td>Korea Exchange bank</td>
<td>27.1</td>
</tr>
<tr>
<td>Malaysia (1)</td>
<td>434</td>
<td>Malayan Banking Berhad</td>
<td>8.4</td>
</tr>
<tr>
<td>Singapore (3)</td>
<td>216</td>
<td>DBS Bank</td>
<td>19.3</td>
</tr>
<tr>
<td></td>
<td>285</td>
<td>Overseas- Chinese Banking Co</td>
<td>13.8</td>
</tr>
<tr>
<td></td>
<td>291</td>
<td>United Overseas Bank</td>
<td>13.5</td>
</tr>
<tr>
<td>Taiwan (11)</td>
<td>136</td>
<td>Taiwan Cooperative Bank</td>
<td>33.2</td>
</tr>
<tr>
<td></td>
<td>156</td>
<td>Bank of Taiwan</td>
<td>27.2</td>
</tr>
<tr>
<td></td>
<td>180</td>
<td>First Commercial bank</td>
<td>24.4</td>
</tr>
<tr>
<td>Thailand (4)</td>
<td>208</td>
<td>Bangkok Bank</td>
<td>20.6</td>
</tr>
<tr>
<td></td>
<td>362</td>
<td>Thai Farmers Bank</td>
<td>10.4</td>
</tr>
<tr>
<td></td>
<td>372</td>
<td>Krung Thai Bank</td>
<td>10.3</td>
</tr>
</tbody>
</table>

Note: Number after country name indicates the number of banks among the world top 500

Source: American Banker 1991
APPENDIX 2B: COMMERCIAL BANK COMPOSITION

<table>
<thead>
<tr>
<th>Type of Bank</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Commercial Banks</td>
<td>12</td>
</tr>
<tr>
<td>Foreign Commercial Banks with full licence</td>
<td>22</td>
</tr>
<tr>
<td>Foreign Commercial Banks with restricted licence</td>
<td>14</td>
</tr>
<tr>
<td>Foreign Commercial Banks with offshore facilities</td>
<td>93</td>
</tr>
</tbody>
</table>

**Commercial Banks in Singapore 1995**

- Local Commercial Banks: 65%
- Foreign Commercial Banks with full licence: 9%
- Foreign Commercial Banks with restricted licence: 16%
- Foreign Commercial Banks with offshore facilities: 10%
## APPENDIX 2C: TURNOVER ON STOCKS & SHARES 1985-1994

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Industrial</th>
<th>Finance</th>
<th>Hotels</th>
<th>Properties</th>
<th>Mining</th>
<th>Plantation</th>
<th>Debentures, Loan Stocks &amp; Bonds</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Units</td>
<td>Dollars</td>
<td>Units</td>
<td>Dollars</td>
<td>Units</td>
<td>Dollars</td>
<td>Units</td>
<td>Dollars</td>
</tr>
<tr>
<td>1985</td>
<td>3,025</td>
<td>6,319</td>
<td>2,145</td>
<td>4,338</td>
<td>286</td>
<td>1,228</td>
<td>109</td>
<td>153</td>
</tr>
<tr>
<td>1986</td>
<td>3,951</td>
<td>8,001</td>
<td>2,608</td>
<td>5,107</td>
<td>411</td>
<td>1,761</td>
<td>178</td>
<td>175</td>
</tr>
<tr>
<td>1987</td>
<td>9,758</td>
<td>22,478</td>
<td>5,385</td>
<td>12,510</td>
<td>1,132</td>
<td>5,262</td>
<td>577</td>
<td>835</td>
</tr>
<tr>
<td>1988</td>
<td>7,152</td>
<td>12,817</td>
<td>3,593</td>
<td>7,097</td>
<td>531</td>
<td>2,178</td>
<td>298</td>
<td>355</td>
</tr>
<tr>
<td>1989</td>
<td>21,646</td>
<td>39,150</td>
<td>9,773</td>
<td>19,655</td>
<td>1,342</td>
<td>4,799</td>
<td>811</td>
<td>1,473</td>
</tr>
<tr>
<td>1990</td>
<td>18,487</td>
<td>36,756</td>
<td>8,922</td>
<td>19,177</td>
<td>2,394</td>
<td>6,173</td>
<td>882</td>
<td>1,583</td>
</tr>
<tr>
<td>1991</td>
<td>15,557</td>
<td>30,549</td>
<td>6,898</td>
<td>16,594</td>
<td>1,489</td>
<td>5,082</td>
<td>670</td>
<td>1,300</td>
</tr>
<tr>
<td>1992</td>
<td>13,904</td>
<td>29,444</td>
<td>7,178</td>
<td>16,704</td>
<td>1,487</td>
<td>6,039</td>
<td>525</td>
<td>973</td>
</tr>
<tr>
<td>1993</td>
<td>66,398</td>
<td>127,797</td>
<td>33,171</td>
<td>67,664</td>
<td>6,585</td>
<td>20,028</td>
<td>2,926</td>
<td>5,627</td>
</tr>
<tr>
<td>1994</td>
<td>45,540</td>
<td>123,520</td>
<td>21,368</td>
<td>60,834</td>
<td>5,419</td>
<td>21,655</td>
<td>2,052</td>
<td>5,456</td>
</tr>
</tbody>
</table>

Source: Stock Exchange of Singapore
CONSTRUCTION CONTRACTS AWARDED, 
1993-95 (S$ millions)
# Appendix 3B: A Comparison of ASEAN Countries' Performance

<table>
<thead>
<tr>
<th>ASEAN</th>
<th>Real GDP * (% yoy)</th>
<th>CPI (% yoy)</th>
<th>Current Account ^</th>
<th>Exchange Rate (vis US$) (end of year)</th>
<th>3M Interbank Rate (% pa) (end of year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>94</td>
<td>95E</td>
<td>96F</td>
<td>1994 bn %GDP</td>
<td>1995 bn %GDP</td>
</tr>
<tr>
<td></td>
<td>94</td>
<td>95E</td>
<td>96F</td>
<td>1994 bn %GDP</td>
<td>1995 bn %GDP</td>
</tr>
<tr>
<td>Singapore</td>
<td>10.2</td>
<td>8.9</td>
<td>8.5</td>
<td>3.1</td>
<td>1.7</td>
</tr>
<tr>
<td>Malaysia</td>
<td>9.2</td>
<td>9.5</td>
<td>8.2</td>
<td>3.7</td>
<td>3.4</td>
</tr>
<tr>
<td>Thailand</td>
<td>8.7</td>
<td>8.6</td>
<td>8.2</td>
<td>5</td>
<td>5.8</td>
</tr>
<tr>
<td>Indonesia #</td>
<td>7.3</td>
<td>8.1</td>
<td>7</td>
<td>8.5</td>
<td>8.6</td>
</tr>
<tr>
<td>Philippines*</td>
<td>5.1</td>
<td>5.7</td>
<td>5.8</td>
<td>9.1</td>
<td>8.1</td>
</tr>
</tbody>
</table>

* For the Philippines, the data of the economy are the GNP, and the 3-month interbank rate are the 90-days T-bills

^ Current account data are in local currencies except Indonesia and Philippines in US$.

* Indonesia consumer price indices are calculated using cumulative m-o-m figures.

Source: Department of Statistics
APPENDIX 3C: URA PROPERTY PRICE INDEX

Source: Graph from URA Real Estate Statistics Series, Price & Rental Indices, 4th Quarter 1995
APPENDIX 3D: URA PROPERTY RENTAL INDEX

Commercial Property by Type

Source: Graph from URA Real Estate Statistics Series, Price & Rental Indices, 4th Quarter 1995
APPENDIX 3E : URA PROPERTY RENTAL INDEX

Residential and Industrial Properties

Source : Graph from URA Real Estate Statistics Series, Price & Rental Indices, 4th Quarter 1995
APPENDIX 3F:
PUBLIC LISTED REAL ESTATE COMPANIES IN SINGAPORE

<table>
<thead>
<tr>
<th>Company</th>
<th>Market Capitalization</th>
<th>Net P/E</th>
</tr>
</thead>
<tbody>
<tr>
<td>B. Sembawang</td>
<td>852</td>
<td>1076</td>
</tr>
<tr>
<td>Bonvests</td>
<td>257.9</td>
<td>10.9</td>
</tr>
<tr>
<td>C. Properties</td>
<td>585</td>
<td>32.6</td>
</tr>
<tr>
<td>Centrepoint</td>
<td>1389.6</td>
<td>10.8</td>
</tr>
<tr>
<td>City Developments</td>
<td>8292.8</td>
<td>20.4</td>
</tr>
<tr>
<td>DBS Land</td>
<td>4190.2</td>
<td>25.5</td>
</tr>
<tr>
<td>First Capital Corp.</td>
<td>840.3</td>
<td>7</td>
</tr>
<tr>
<td>HK Land</td>
<td>5973.9</td>
<td>22.4</td>
</tr>
<tr>
<td>Hong Fok</td>
<td>276.8</td>
<td>7.7</td>
</tr>
<tr>
<td>Liang Court</td>
<td>510.7</td>
<td>26.8</td>
</tr>
<tr>
<td>Malayan Credit</td>
<td>882.2</td>
<td>19.6</td>
</tr>
<tr>
<td>PM Holdings</td>
<td>146.3</td>
<td>17.7</td>
</tr>
<tr>
<td>Parkway Holdings</td>
<td>1229.1</td>
<td>51.4</td>
</tr>
<tr>
<td>Straits Steamship</td>
<td>2803.7</td>
<td>28.8</td>
</tr>
<tr>
<td>Scotts Holdings</td>
<td>308.5</td>
<td>43.3</td>
</tr>
<tr>
<td>Spore Land</td>
<td>3025.9</td>
<td>36.7</td>
</tr>
<tr>
<td>Tokyu Land</td>
<td>121899</td>
<td>-</td>
</tr>
<tr>
<td>Town &amp; City</td>
<td>47.3</td>
<td>-</td>
</tr>
<tr>
<td>UOL</td>
<td>1244.1</td>
<td>23.8</td>
</tr>
</tbody>
</table>

Source: The Straits Times - July 25 1996
## APPENDIX 3G: CAPITAL RAISED THROUGH DEBENTURES, BONDS & LOAN STOCK (1984- Jan 19)

<table>
<thead>
<tr>
<th>Year</th>
<th>Company</th>
<th>Debentures, Bonds &amp; Loan Stock</th>
<th>Amount raised</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>1987</td>
<td>City Development</td>
<td>5.5% unsecured bonds due 1994 with warrants expiring 1992</td>
<td>SGD $147,827,500</td>
<td>Raise medium term fixed rate funds to replace short term borrowings</td>
</tr>
<tr>
<td>1987</td>
<td>Parkway Holdings</td>
<td>6% loan stock due 1993 with warrants expiring 1991</td>
<td>SGD $60,000,000</td>
<td>1) Increase long term capital funds 2) Augment long term working capital to give the Group flexibility to take advantage of Redeem existing 8% loan stock</td>
</tr>
<tr>
<td>1987</td>
<td>Singapore Land</td>
<td>6% convertible loan stock maturing 1999</td>
<td>SGD $92,232,440</td>
<td></td>
</tr>
<tr>
<td>1987</td>
<td>United Overseas Land</td>
<td>4.75% guaranteed bonds due 1991 with warrants</td>
<td>SGD $50,000,000</td>
<td></td>
</tr>
<tr>
<td>1989</td>
<td>DBS Land</td>
<td>1.5% bonds due 1994 with detachable warrants expiring 1994</td>
<td>SGD $100,000,000</td>
<td>Finance residential developments</td>
</tr>
<tr>
<td>1989</td>
<td>Straits Steamship</td>
<td>1.5% loan stock due 1994 with detachable warrants</td>
<td>SGD $150,000,000</td>
<td>Finance commercial developments</td>
</tr>
<tr>
<td>1990</td>
<td>DBS Land</td>
<td>5% unsecured bonds with detachable warrants</td>
<td>SGD $300,000,000</td>
<td>Finance recent acquisitions and development projects</td>
</tr>
<tr>
<td>1990</td>
<td>DBS Land</td>
<td>1% unsecured bonds with detachable warrants</td>
<td>US $75,000,000</td>
<td>As above</td>
</tr>
</tbody>
</table>

Source: "Is there a place for Financial Innovation in the Singapore Property Market?" by Mrs. Ong Choon Fah, Dr. Amos Koh, Dr. Lam Swee Sum
APPENDIX 4A: 1990 REIT MARKET COMPOSITION

1990 REIT MARKET COMPOSITION

- Equity
- Mortgage
- Hybrid

Percentage of Total

- Number of REITs
- Asset Value of REITs
- Market value of REITs

70% 60% 50% 40% 30% 20% 10% 0%

- 70% - 60% - 50% - 40% - 30% - 20% - 10% - 0%
APPENDIX 5A: UNIT TRUST PERFORMANCE

## Performance Of Singapore Authorised Unit Trusts

<table>
<thead>
<tr>
<th>Name of unit trust</th>
<th>Volatility</th>
<th>3 mth</th>
<th>6 mth</th>
<th>1 yr</th>
<th>3 yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% Chg</td>
<td>% Chg</td>
<td>% Chg</td>
<td>% Chg</td>
<td>% Chg</td>
</tr>
<tr>
<td>Allied Philip Asia Pac Gth</td>
<td>N/A</td>
<td>5.61</td>
<td>17.15</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>CL Asia Pacific Growth</td>
<td>6.61</td>
<td>0.35</td>
<td>14.04</td>
<td>7.23</td>
<td>26.13</td>
</tr>
<tr>
<td>DBS Shanston Asia Pacific</td>
<td>8.16</td>
<td>2.35</td>
<td>19.18</td>
<td>12.87</td>
<td>34.22</td>
</tr>
<tr>
<td>DBS Mendaki Growth</td>
<td>4.71</td>
<td>4.64</td>
<td>17.75</td>
<td>10.42</td>
<td>9.21</td>
</tr>
<tr>
<td>Five Arrows Asian Enterprise</td>
<td>N/A</td>
<td>1.72</td>
<td>21.54</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Morgan Grenfell Asia Prem Tst</td>
<td>N/A</td>
<td>0.96</td>
<td>14.13</td>
<td>9.07</td>
<td>N/A</td>
</tr>
<tr>
<td>Yokko Oriental Growth</td>
<td>N/A</td>
<td>0.09</td>
<td>9.94</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>OCBC Savers Asia Recovery</td>
<td>5.95</td>
<td>4.97</td>
<td>17.34</td>
<td>13.64</td>
<td>36.29</td>
</tr>
<tr>
<td>DUB Union East Asian</td>
<td>6.95</td>
<td>-1.67</td>
<td>10.62</td>
<td>4.12</td>
<td>4.07</td>
</tr>
<tr>
<td>Schroder South East Asia</td>
<td>7.47</td>
<td>4.69</td>
<td>22.83</td>
<td>12.13</td>
<td>37.53</td>
</tr>
<tr>
<td>UOB United Pacific Equity</td>
<td>N/A</td>
<td>0.00</td>
<td>10.00</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>UOB United Asia</td>
<td>6.29</td>
<td>1.09</td>
<td>14.57</td>
<td>8.19</td>
<td>39.93</td>
</tr>
</tbody>
</table>

### BOND

<table>
<thead>
<tr>
<th>Name of unit trust</th>
<th>Volatility</th>
<th>3 mth</th>
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### ASIA AND SINGAPORE

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### SINGAPORE

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### CPF/IRAS

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### OTHERS

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### Average (all funds)

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**Source**: Micropal Asia

N/A - figures are not available as some funds are too new.

Source: Table taken from "Financial Planner 1996"
### APPENDIX 5B: FINANCE COMPANIES LOANS & ADVANCES BY INDUSTRY (1984-1994) $ million

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<td>Agriculture, Mining &amp; Quarrying</td>
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<td>0.9</td>
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<td>Manufacturing</td>
<td>217.6</td>
<td>231.1</td>
<td>236.5</td>
<td>180</td>
<td>262.5</td>
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<td>Building &amp; Construction</td>
<td>923.7</td>
<td>810.1</td>
<td>852.5</td>
<td>715.4</td>
<td>879.6</td>
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<td>General Commerce</td>
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<td>276.8</td>
<td>245.4</td>
<td>369.6</td>
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<td>Financial Institutions</td>
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<td>648.4</td>
<td>669.8</td>
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<td>262.2</td>
<td>286</td>
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<td>2610</td>
<td>2935.4</td>
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Source: Monetary Authority of Singapore
APPENDIX 5C: PRIME LENDING & DEPOSIT RATES (1984-1994)

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<td>Prime lending rate</td>
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<td>3 months</td>
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<td>2.95</td>
<td>5.05</td>
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<td>6 months</td>
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<td>12 months</td>
<td>6.8</td>
<td>3.3</td>
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<td>2.97</td>
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<td>3.41</td>
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<td>4.48</td>
<td>5.8</td>
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Source: Monetary Authority of Singapore
APPENDIX 5D

JLW RENTAL VALUE PROPERTY INDEX (1985 = 100)

Source: JLW Research, October 1995
7. Bibliography

"Real Estate Investment Trusts for the 1990s", The Real Estate Finance Journal, Summer 1994

"Real Estate Investment Trusts", Singapore's Property Market Consultative Committee Report, 1986

"World Rental Levels", Property Link, 1996 Vol.2 No.2


"An Introduction To Property Trust Market in Malaysia", Overseas Chinese Banking Corporation's Commentary Report, September 1995

"Bull Run Funds Lose Their Puff", Singapore Business, July 1996

"Eye On Unit Trusts", Financial Planner, July 1996

"Housing Loan Rates", Property Link, 1996 Vol.2 No.3

"Investing in Unit Trusts", Financial Planner, July 1996

"Property Measures Begin To Bite", Singapore Business, July 1996

"Residential: Keen Interest Keeps the Market Bouyant", Property Review, June 1996

"Singapore: An Update on Rentals and Capital Values", Property Link, 1996 Vol.2 No.2

"The Investors' Guide To Unit Trusts", Schroder Unit Trusts, 1993

"Your Guide To Unit Trusts", a brochure compiled by the Development Bank of Singapore, 1986

Anthony Downs, "Public, Private valuations Do Diverge", National Real Estate Investor, December 1994

Asia Pacific Property Digest: The Market as at January 1996, Jones Lang Wootton Research and Consultancy, February 1996

Brueggeman and Fisher, Chapter 20: Sources of equity and Equity Financing for Real Estate, Real Estate Finance and Investment, Irwin, 1993

Christopher E. Lee, "REITs: Another Case of Musical Chairs?", The Real Estate Finance Journal, Spring 1995

Doing Business in Singapore, Ernst & Young's International Business Series, 1995
Dr. Amos Koh, Ong Choon Fah & Dr. Lam Swee Sum, "Is There a Place for Financial Innovation In Singapore Property Market", Inter-Faculty Conference, 23rd February 1990

F. Yeo Teng Yang, "Mutual Funds and Unit Trusts: Their Role and Regulation", Ministry of Finance, August 1970

GEM Property Trust: Information Memorandum, Growth Equities Mutual Limited, October 1991

JLW Asia Pacific Property '96, Jones Lang Wootton, 1996

JLW Asia Pacific Property Investment Guide 1995, Jones Lang Wootton, May 1995

JLW Property Trends: The Market as at January 1996, Jones Lang Wootton, January 1996

JLW Property Trends: The Market as at October 1995, Jones Lang Wootton, October 1995

Lawrence S. Kaplan and Craig S. Stern, Kenneth Leventhal & Company, "REITs and UPREITs: Characteristics, Requirements and Taxation", The Real Estate Tax Digest, 1994

Leong Weng Chee, "Key Issues In Investing in Property Trust Investment", UNIBEAM Vol 19/ Journal Building & Estate Management

Managing Corporate Real Estate in Singapore- A Survey, Jones Lang Wootton, October 1991

Mark P. Synderman, Chapter 2: Commercial and Multi-Family Real Estate Investment Vehicles, Managing Real Estate Portfolios, Irwin Publishers, 1994

NAREIT White paper on Funds From Operations, August 22, 1994


Property Trusts: A Singapore Perspective, Jones Lang Wootton, October 1991


Sim Mong Soo, Law and Practice: Property Transactions, EPB Publishers, 1995

Sim Mong Soo, Law and Practice: Property- Answers to Your Most Asked Questions, EPB Publishers, 1995

Sim Mong Soo, Law and Practice: Sale and Purchase of Property, EPB Publishers, 1996


Statistical Report by the Department of Statistics, Singapore, Singapore National Printers, 1993


Taxation of Companies in the Republic Singapore, Ernst & Young, 1996 Edition


The Statutes of the Republic of Singapore, Banking Act (Chapter 19), Revised Edition 1994

The Statutes of the Republic of Singapore, Companies Act (Chapter 50), Revised Edition 1994

The Statutes of the Republic of Singapore, Securities Industry Act (Chapter 289), Revised Edition 1985

The Statutes of the Republic of Singapore, Trustees Act (Chapter 337), Revised Edition 1985

URA Real Estate Statistics Series, Price & Rental Indices 4th Quarter 1995

Claire Barnes, Asia's Investment Prophets, Century Business Books, 1995