The Role of Fund Management in Promoting Capital Markets Development in Asian Economies

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Chapter One Executive Summary

1.1 Introduction

One of the most important financial developments in developed economies is the growing importance of institutional investors as individual investors increasingly delegate the management of their portfolios to professional fund managers. In recent years, the continuing liberalization of cross-border capital flows in developing economies has led to international diversification of institutional portfolios from developed economies and the growth of the fund management industry in the recipient developing economies.

Asian economies have enjoyed some of the highest growth rates in the world in the recent past. To continue such rapid economic expansion, they need to attract foreign capital inflow and mobilize domestic savings. As one of the most important classes of institutional investors, fund management companies (FMCs) play a vital role in this intermediation process.

Indeed, the statistics reported in Table 1.1 suggest that at the end of 1995 mutual fund investment in Asian economies, excluding Japan, reached US\$156 billion and accounted for 9.8% of the aggregate stock market capitalization in these economies. In some developing economies such as China, Chinese Taipei, Indonesia, Korea, the Philippines, and Thailand, mutual fund assets accounted for over 9% of local stock market capitalization.

During the FMD meeting in Tokyo in October 1994, the Hong Kong delegates suggested that Hong Kong FMD was interested in looking at the role of fund management in the development of domestic capital markets in the Asia-Pacific region. The suggestion was well received by other members. This report studies the findings of this study, and proposes policy recommendations to promote the fund management industry in the region.

1.2 Project Outline

In this study, fund management in Asian economies is viewed from two perspectives. The first perspective focuses on the mutual funds investing in these economies and evaluates the extent to which fund investment can facilitate resource allocation in these economies. To this end, we compare the performance of the funds to that of a corresponding Morgan Stanley Capital Index benchmark. We also distinguish between stock selection and market timing abilities of fund managers. Stock selection ability is generally viewed as desirable as it facilitates the flow of financial resources to their most productive uses. Correct market timing can provide protection against downside risks for investors, yet it might have destabilizing effects on capital markets during a bull market period. Apart from evaluating fund performance in light of modern portfolio theory, we also examine the patterns of portfolio allocation among different industrial sectors. Depending on the economic structure and the stage of development of the recipient economies, FMCs can channel savings into sectors that are the engines of economic growth or are deemed to be important in sustaining economic growth, such as the infrastructure and technology sectors.

In the second perspective, attention is shifted to the FMCs themselves. A questionnaire survey of FMCs was conducted in Australia, Chinese Taipei, and Hong Kong to address a number of issues. An issue of great concern to policy makers in developing economies in the process of dismantling their capital controls is the nature of the capital inflows. As a conduit that channels the much needed capital to developing economies to finance their rapid economic growth, FMCs might have also increased the vulnerability of the these economies to volatile shifts in portfolio investment as sentiments about the economic prospects of these economies change. An understanding of the investment intentions and criteria of FMCs would be of great value to policy makers in nurturing a favorable and stable economic environment to attract long-term investment from international fund managers. A second issue that we study is the contributions of the fund management industry to the development of the local capital market. These contributions include the promotion of the idea of collective investment to investors, the training of fund managers, the transfer of portfolio investment technology, and the use of research support facilities.

Table 1.1 Mutual Fund Investment in Asian Economies excluding Japan (December 1995)

	Total assets ¹ (US\$ billion)	Market capitalization ² (US\$ billion)	Total assets as % of market capitalization
Cl.:	(5	41.0	15.60/
China	6.5	41.8	15.6%
Chinese Taipei ³	23.1	189.4	12.2%
Hong Kong	18.0	301.1	6.0%
India	7.6	183.3	4.1%
Indonesia	6.5	66.0	9.8%
Korea	16.7	182.2	9.2%
Malaysia	13.9	222.7	6.2%
Philippines	5.4	58.9	9.2%
Singapore	8.1	199.7	4.1%
Thailand ³	21.8	142.6	15.3%
Others ⁴	28.4	N/A	N/A
Total	156.0	1587.7	9.8%

^{1.} Sources: Micropal Inc., Benchmark Inc., Lipper Analytical Services, 1996 Annual Report of Securities Investment Trust & Advisory Association of Taipei, and A Handbook of Mutual Funds 1996, Thailand. The figures reported exclude funds of funds.

^{2.} Source: LGT Guide to World Equity Markets 1996.

^{3.} Also includes domestic funds.

^{4.} Regional funds invested in other Asian economies excluding Japan.

1.3 Major Findings

1.3.1 Performance of Asian funds

Contrary to the common perception that fund managers cannot outperform the market, fund managers who managed the Asian funds analyzed in the study have generally demonstrated the ability to select underpriced stocks and outperform a corresponding Morgan Stanley Capital Index benchmark. There is no evidence, however, that they have market timing ability.

We also find that there is a broad matching between the sectors of the economy in which funds invest and those driving growth. However, the share of assets invested in the sectors that are important for sustaining future economic growth, e.g. telecommunication, technology, transportation, and infrastructure sectors, is inadequate. The lack of investment in these sectors might reflect barriers to cross-border capital flows. In order to increase productivity, there is an urgent need for economies in the region to gradually remove capital controls and to consider securitization of infrastructure project financing.

1.3.2 Impact on the local capital market

The experiences of Malaysia, Thailand, and Chinese Taipei suggest that the government can play an active role in promoting mutual fund products to the general public who have limited access to the stock market. Judging from the size of mutual fund assets as a share of bank deposits in Malaysia (15%), mutual funds can be an appropriate and economically sensible means for retail investors to store their savings. The presence of FMCs has improved the liquidity and added to the stability of the often volatile stock markets in these economies.

Through research, FMCs can improve the efficiency of their investments and facilitate the collection and dissemination of relevant information to the financial community. Our survey shows that most FMCs rely on both in-house and outside brokerage for research support. Furthermore, FMCs consider local research support to be more important than overseas research support.

There is also evidence that foreign-based FMCs do contribute to the local capital market by transferring fund management technology to local fund managers. This input of foreign expertise is especially important to the development of a fund management industry in its transition from an infant to a mature stage. The participation of foreign FMCs can help promote and enhance the skills and professionalism among local fund managers, which are crucial to upholding investors' confidence and preventing the shortage of skilled personnel experienced by the Malaysian fund management industry in the early 90s.

1.3.3 Investment criteria of fund managers

In determining a benchmark portfolio, the most important market infrastructure factors for fund managers are market liquidity, research support, and market capitalization. Thus, markets that can facilitate trades and offer a variety of choices would command a comparative advantage. Information disclosure turns out to be the most important element among legal and regulatory framework factors. There is evidence to suggest that the more developed the local fund management industry, the more likely that fund managers would take a long-term investment perspective.

1.3.4 Location decision of FMCs

In choosing a location in which to operate, FMCs are most concerned with the efficiency of the local financial services market, reliability of the legal system, the state of development of information technology, the quality of human resources, and economic and political stability. Operating costs and business tax incentives appear to be relatively less important. Thus, a decent economic, legal, and political infrastructure is more important than tax relief in attracting fund management business.

1.3.5 Policy recommendations

The fund management industry serves the very important function of channeling both domestic funds and foreign funds to the local economy. Such a process could have an impact on the development of the local capital market in terms of enhancing the liquidity of the market, introducing new financial products and services, and improving the investment know-how of the local community. As institutional investors, FMCs should also be in a position to pressure on corporations to disclose more information and to enhance the quality of corporate governance. The last chapter of this report offers 15 policy recommendations under the following four broad areas:

- to facilitate the establishment of FMCs
- to improve the investment know-how of fund managers
- to strengthen investors' confidence and enhance transparency
- to enhance the market infrastructure of Asian economies and to promote new products among Asian economies

The rest of the report is structured as follows. Chapter 2 provides an overview of the salient features of the fund management industry in Thailand, Malaysia, Chinese Taipei, Hong Kong, and Australia. Chapter 3 assesses the performance of Asian funds. Chapter 4 reports the results of the fund management industry survey conducted in Australia, Chinese Taipei, and Hong Kong. Chapter 5 suggests policy recommendations to promote the fund management industry in the region.

Chapter Two Overview of the Fund Management Industry

This chapter provides an overview of the state of development of the fund management industry in a number of Asian economies. They are Malaysia, Thailand, Chinese Taipei, Hong Kong, and Australia. The Malaysian government has launched one of the most proactive policy plans to promote the local fund management industry. The degree of acceptance of collective investment schemes there ranks as one of the highest in Asia excluding Japan. Thailand and Chinese Taipei are late-comers but the industry has grown rapidly in recent years through cooperation between the government and the local fund management association. Australia and Hong Kong have a well developed fund management industry. However, the former is still a predominantly localized market, while the latter is the fund management centre of Asia with a large number of international FMCs operating there.

2.1 Malaysia

In Malaysia, the fund management industry is dominated by the state-owned FMCs. In 1995, Permodalen Nasional Berhad (PNB) accounted for 81% of the RM44.1 billion unit trust assets and Employee Providence Fund (EPF) accounted for 86% of the RM97.8 billion provident and pension fund assets.

The unit trust industry has a long history in Malaysia since its inception in 1959. The industry, however, did not take off until the 1985 when the federal government launched two national unit trust funds, the Amanah Saham Nasional (ASN) and the Amanah Saham Bumiputera (ASB), managed by the PBN. The second wave of growth in the industry came in the economic expansion period of1993-94. The increase in wealth and savings of the private sector prompted the state governments to emulate the federal government by introducing their own unit trusts. State-sponsored funds became big players in the industry. The government also sponsored the Amanah Saham Wawasan 2020 fund which is targeted at younger Malaysians of all ethnic groups between the ages of 12-19. With strong promotional effort by the government, individual participation in unit trust is high. In 1996, there were 8 million unit holders, and 91% of the units were held by individual investors. The popularity of unit trusts as an alternative means of saving is evidenced by the fact that unit trust assets represented 15% of commercial bank deposits in 1996.

The size of the pension fund industry is more than twice of that of the unit trust industry. In 1995, some 7.3 million employees were required to contribute nine per cent of their salary to the EPF and their employers contributed another 11 per cent. Since its inception, the EPF has been an important source of financing for government budget deficits. In recent years, however, the percentage of assets invested in government securities has been declining towards the 70% statutory ceiling.

Table 2.1 Size of the Fund Management Industry in Malaysia¹

	1992	1994	1995	1996
No. of fund management companies	13	20	27	30
No. of funds	40	52	67	77
Assets under management (RM billion)	15.7	35.7	44.1	60
as percentage of KLS market cap. as percentage of bank deposits	N/A N/A	7.0% N/A	7.8% N/A	7.4% 15%

^{1.} Source: Securities Commission, Annual Report.

In spite of the rapid growth of the unit trust industry, the Malaysian experience points to the risks involved in marketing unit trust products. There have been two problems. The first was lack of supervision of buying funds on margin. The margin of financing to buy funds was lower than that on shares, reaching 100% in some extreme cases. This kind of excessive speculative investment tactic backfired during stock market downturns. The second problem was the aggressive distribution of fund products, especially by former insurance industry people. In 1994, excluding funds managed by PNB, 35% of the sales of unit trusts were secured by agents. The private management companies, in particular, were very dependent on agents to market their products. As the distribution of unit trusts was unregulated, the overall level of knowledge and qualification of salespeople was unsatisfactory, and concern arose about the adequacy of information imparted to investors. Besides the marketing problems, the growth of the unit trust industry was also hampered by a lack of resources, particularly the in terms of skilled personnel.

In recent years, the Malaysian government has taken bold steps to liberalize and increase competition in the industry. The Securities Commission submitted a proposal for a National Fund Management Policy (the Policy) to the government in the first quarter of 1995. This was followed by a capital market liberalization package announced by the Deputy Prime Minister in June 1995. An integrated approach to development of the fund management industry was necessary in order to optimize the use of local funds for economic development, catalyzing the development of the capital market. There was need to strengthen the technical skills of local fund managers and, at the same time, to promote higher levels of professionalism within the industry to prepare for increased competition in the global environment.

The Policy addressed issues such as mobilization of existing and new savings, the efficient channeling of these funds into the capital markets, and enhancement of the skills, capabilities, and professionalism of local fund managers. More efficient and effective management of the nation's savings can bring about incremental rewards in terms of lower future taxation. This is because an efficient fund management industry can shift part of the burden of providing retirement and other social benefits to the population, away from the public sector to the private sector, hence reducing the government's social obligations to retirees.

Some important proposals from the Policy are:

- (a) To encourage local fund management companies to manage funds from regional and international sources. In this regard, two tax incentives were announced by the Minister of Finance in his 1997 Budget Speech:
 - Extend the 10% concessionary tax rate enjoyed by foreign fund management companies to local fund management companies for income derived from management of funds sourced from outside Malaysia.
 - Exempt capital gains and dividends of closed-end funds from taxation.
- (b) Deregulate the EPF and other institutional funds. This is identified as a key strategy in developing the fund management industry. Institutional funds can stimulate the growth of the industry by allowing part of the funds to be managed by external fund managers.
 - Allow eligible EPF account holders to transfer part of their funds to unit trusts managed by external fund managers.
 - Raise the ceiling of EPF's allowed investment on the KLSE to 15% of its total assets. EPF's contributors with RM50,000 are allowed to withdraw up to 20% of the balance for investment in approved fund management companies.
- (c) Liberalizing the industry. Establishment of wholly-owned foreign fund management company with tax concessions for income derived from non-Malaysian activities. Foreign FMCs that want to tap local institutional funds will have to form joint ventures with a maximum foreign equity of 70%. The presence of foreign fund managers will give Malaysia a higher profile in the global fund management arena, and facilitate the training and transfer of fund management techniques, increase competition, and raise the standards of professionalism.

In December 1996, the first 10 joint-venture foreign fund management companies, with at least 30% local equity, were allowed to manage domestic unit trusts. The foreign FMCs are required to manage at least US\$100 million in funds sourced from outside Malaysia. This move is expected to benefit the industry through transfer of technology and increased competition. The participation of well capitalized and well managed international fund management groups can also bolster investors' confidence. Other measures to increase competition in the industry include allowing stockbroking firms to operate unit trusts, and relaxing work permit requirements for expatriates.

2.2 Thailand

The government has played an important role in the development of the fund management industry. The first fund management company, the Mutual Fund Public Company (MFPC) was set up in 1975 as a joint venture between the government and the International Finance Corporation, a subsidiary of the World Bank. The mandate of the MFPC was to promote group investment schemes to the general public. To achieve this objective, fund units were issued in small denominations to attract the general public.

Although a latecomer in developing the fund management industry, the Thai industry has been liberalizing at a faster pace than that of Malaysia. The government offers generous tax benefits to the industry; both dividend income and capital gains are tax exempt at the fund level, and mutual funds pay lower brokerage commissions. The industry has experienced phenomenal growth since 1992, after seven additional fund management company licenses were granted. The monopoly position the MFPC disappeared and its market share dropped to 20% by the end of 1995. The government set up licensing requirements to ensure that the new FMCs had a wide distribution network and had access to foreign investment expertise. The core shareholders of FMC must include commercial banks, finance or securities companies, and a foreign financial institution. Some of the big foreign names that have teamed up with local FMCs include Bakers' Trust, G.T. Management, Morgan Grenfell, Barclays de Zoete Wedd, and Warburg Asset Management.

Between 1992 and 1995, the number of funds increased by 265% from 37 to 135 and assets under management grew by 243% from US\$2.3 billion US\$7.9 billion. The amount of professionally managed retirement funds is relatively small. As of 1995, total assets under management were 62.75 billion baht.

The fund management industry has played an important role in the development of Thailand's capital market. Mutual funds investments have helped to improve the liquidity and stability of the Stock Exchange of Thailand (SET). Although mutual fund assets only represented 5.5% of the stock market capitalization in 1995, they accounted for 8.15% of the total turnover, up from only 3.56% in 1993. To encourage foreign participation in the local stock market, a SET owned FMC called the Thai Trust Fund Management Company (TTFMC) was established in December 1996. TTFMC issues mutual fund units to foreign investors and invests the money in shares which are set aside by listed companies on the SET in an individual trust fund.

At December 1994, 65% of the mutual fund investors were individual investors. Considering the fact that only 1% of the population in Thailand participates in the stock market, the fund management industry has been very successful in mobilizing savings from individual investors who did not have access to the stock market before.

Table 2.2 Size of the Fund Management Industry in Thailand¹

	1992	1995
Assets under management		
Baht billion	57.6	197.6
US\$ billion	2.3	7.9
Percentage of stock market	3.8%	5.5%
Percentage of bank deposit	N/A	6.2%
Turnover		
Percentage of stock market turnover	3.56%	8.15%

^{1.} Sources: An Overview of The Mutual Fund Industry in Thailand, The Handbook of Mutual Funds in Thailand 1996

In terms of fund products, most of the funds are closed-end. Financial liberalization since 1992 has led to the establishment of more open-end funds with an income yielding objective. This contrasts sharply with the long-term capital appreciation investment objective of most closed-end funds. Another trend is that closed-end funds have a shorter maturity, around three to five years, than those funds set up before 1992 which generally have a 10 years maturity. The growth of open-end funds, which are subject to redemption risks from unit holders, and the shortening of the duration of closed-end funds have led to a shift in the investment horizon from long-term to short-term.

2.3 Chinese Taipei

In the mid 1980s, there were only four fund management companies in Chinese Taipei. In the late 1992, the government started to promote the industry by granting another 11 licenses. By 1996, there were already 21 FMCs, or securities investment trust enterprises, managing NT\$474.92 billion (or US\$17.31 billion) of assets. This amounted to 2.78% of the stock market capitalization at December 1996. Hence, the size of the mutual fund industry is still small relative to those of Thailand and Malaysia. The number of funds grew from 28 in 1992 to 125 in 1996, most of the growth coming from open-end funds. In 1996, 84.8% of the funds were raised locally and 97.8 % of the funds were invested locally. Of the assets that were invested locally in 1996, half were invested in domestic equity funds and the other half in domestic bond and money market funds. The high percentage of money invested in bond and money market funds is a unique feature of the Chinese Taipei fund industry.

The stock market in Chinese Taipei is well known for its high turnover. Such a high liquidity reflects the short-term investment horizon of individual investors who accounted for 90% of the stock market trading volume. The fund management industry seems to exhibit the same characteristic. In spite of its size, the industry accounted for 7.01% of the stock market turnover in 1996. Hence, there is ample room for institutional investors to develop and to reduce the volatility and market turnover.

Currently, most of the employee pension fund assets are in the custody of and managed by the government. In order to promote the development of Chinese Taipei as an asset management centre, the government has recently proposed that the Securities Transactions Act be revised to give institutional investors and securities investment consulting companies the right to trade on behalf of their clients. This suggests that fund management companies will be allowed to manage an estimated NT\$350 billion of employee pension fund assets.

Table 2.3 Size of the Fund Management Industry in Chinese Taipei¹

	1995	1996
Assets under management		
NT\$ billion	251.82	474.92
US\$ billion	9.22	17.31
Percentage of stock market	2.89%	2.78%
Turnover		
Percentage of stock market turnover	5.51%	7.01%

^{1.} Source: Securities Investment Trust & Advisory Association of Taipei, Annual Report 1996.

2.4 Australia

The past decade has seen a dramatic expansion in Australia's fund management industry. Funds under management have grown from A\$60 billion in 1984 to over A\$300 in 1996. At December 1996, there were 61 FMCs in Australia managing A\$360, or US\$268 billion, worth of assets. Relative to the three other Asian economies mention above, in Australia the industry is more competitive with the ten largest FMCs accounted for 60% of the total assets under management.

In spite of its size, the industry is largely a local industry. 97% of the assets under management were sourced in Australia and 87.7% of the assets were invested in the local capital market. Of the 87.7% of fund assets invested locally, equity accounted for 33%, bond and money market investments accounted for 44% and property-related investments accounted for the balance.

¹. For the latest development of financial liberalization in Chinese Taipei, please refer to *Taiwan's Achievements in Promoting Financial Liberalization and the Direction of Financial Reform*, by Dr. Paul C. H. Chiu, Ministry of Finance.

The government plays a vital role in the success of the fund management industry in Australia. The government encourages investment in superannuation funds through various kinds of tax concessions and allows private fund management companies to manage the funds. In 1996, superannuation funds accounted for 54% of total assets under management. Life insurance assets and unit trust funds accounted for around 12% each.

2.5 Hong Kong

Hong Kong's fund management industry differs in many respects from those of other Asian economies. First and foremost, Hong Kong is the fund management centre of Asia. At December 1996, there were 120 FMCs authorized by the Hong Kong Securities and Futures Commissions (SFC) managing well over 1,500 funds. The local fund management association, the Investment Fund Association (IFA), has 45 members that include many big players in the industry. They managed US\$101 billion of assets at December 1996. Out of this amount, unit trusts and mutual funds accounted for 45.4%, pension funds 24.8%, institutional funds 22.3%, and private client funds 7.5%. The market is very international in many respects. Most of the fund assets under management were sourced and invested outside Hong Kong. In 1996, 33% of the total assets were sourced from Hong Kong and 29.8% were invested in Hong Kong.

Second, most of the FMCs are foreign-based. Many well-known international FMCs use Hong Kong as their Asia-Pacific headquarters. This underscores the importance of Hong Kong as a fund management hub in the region. In fact, almost half of the assets under management in 1996 (47.7%) were invested in other Asia-Pacific economies, including Japan.

Third, most of the funds in Hong Kong are domiciled in other jurisdictions, mostly international tax haven countries such as Luxembourg and the Cayman Islands. Hence, funds not established in Hong Kong can be offered for sale.

Fourth, as with Chinese Taipei, retail interest in mutual funds is low. Despite its status as the fund management centre of the region, only 4 percent of the population in Hong Kong invests in mutual funds.² This contrasts sharply with the much greater retail participation in mutual funds in Japan, Malaysia, and Thailand. The aversion of Chinese communities to the concept of group investment schemes remains a stumbling block in the development of the fund management industry in the region.

Finally, the fund management industry in Hong Kong has developed without any form of government incentive programs such as tax benefits. This is in sharp contrast to the situation in other Asian economies where government plays a leading role in promoting the industry. One area where the Hong Kong government has taken a active role is the establishment of the Mandatory Provident Fund (MPF) scheme. The MPF Schemes Ordinance was enacted in 1995 and the subsidiary legislation was passed in April 1998. The MPF is expected to be in operation in early 2000.

². The participation rate in Singapore is also 4%.

The MPF will cover a working population of 3 million, 2.2 million of them are not currently covered by any retirement scheme. Both employers and employees need to contribute five percent of the employee's salary up to a maximum salary of HK\$20,000 per month. The implementation of the MPF is expected to provide an impetus to the local capital market. It will provide more long term funding for the stock and debt markets. The local fund management industry stands to benefit from the opportunity of managing a huge sum of retirement assets, estimated to be HK\$12 billion in the first year. As up to 70% of the contributions can be invested in non-Hong Kong dollar assets, the MPF is expected to stimulate growth in other capital markets in the region.

Chapter Three Performance Evaluation

3.1 Introduction

In Europe and the United States, where the fund management industry is well developed, the investment performance of fund managers has come under close scrutiny. In general, empirical evidence suggests that fund managers cannot outperform a passive market portfolio. As fund performance measures the efficiency of resource allocation, performance is particularly important to emerging economies where capital is relatively scarce. With the exception of Australia, Hong Kong, and Singapore, the rest of the Asian economies covered in this study have yet to develop an efficient financial market infrastructure. The development of group investment schemes such as mutual funds and unit trusts is an important vehicle to mobilize domestic and foreign savings to finance the growing funding needs of the economy.

In this chapter, we evaluate the investment performance of funds invested in the capital markets of Asian economies. Besides using standard performance measures based on asset pricing models to evaluate fund performance, we also examine asset allocation of the funds by industrial sectors to see whether mutual funds do invest in sectors that are deemed to be important for economic growth. The rest of the chapter is organized as follows. Section 3.2 describes the concepts of risk-adjusted return, stock selection ability, and market timing ability. Section 3.3 reports on and evaluates the performance of Asian funds. Section 3.4 examines the industrial sectors distribution of mutual fund assets. Section 3.5 compares the asset allocation patterns of domestic and foreign fund managers in Thailand.

3.2 Risk Adjusted Returns, Stock Selection Ability, and Market Timing Ability

3.2.1 Risk adjusted returns

In the profession, we usually measure performance by return per unit of risk or risk-adjusted return. Two commonly used measures of risk adjusted return are the Sharpe ratio and the Treynor ratio. The Sharpe ratio is the realized portfolio return (R_p) in excess of the risk free rate (R_f) to the total volatility of the portfolio measured by the standard deviation of portfolio return, σ_p :

Sharpe ratio =
$$\frac{R_p - R_f}{\sigma_p}$$

The Treynor ratio is the realized portfolio return (R_p) in excess of the risk free rate (R_p) to the volatility of portfolio return measured by the portfolio beta, β_n :

Treynor ratio =
$$\frac{R_p - R_f}{\beta_p}$$

Standard deviation can be interpreted as the total volatility of the a fund's return, while beta is the contribution of the fund's return volatility to the market portfolio. The beta

of the fund's return can be estimated by the following Capital Asset Pricing Model (CAPM) regression:

$$R_{p} - R_{f} = \alpha + \beta_{p} (R_{m} - R_{f}) + e_{p}$$
 (1)

where R_p = the fund's return

 $R_f = risk free rate$

 $R_m = return on the market portfolio$

 α = intercept term $e_n = residual term$

3.2.2 Stock selection and market timing abilities

Stock selection is the ability of fund managers to select stocks that are superior to the market portfolio in terms of return. Such a stock selection ability can be estimated from equation (1) in which the different components can be interpreted as:

 $R_{p} - R_{f} =$ $\beta_{p} (R_{m} - R_{f}) =$ $\alpha =$ Total excess return Risk premium

Total excess return - risk premium.

(Selection abilities of fund managers)

Market timing is the ability to forecast correctly the direction of movement of the market. If investors expect a rising market, they can structure a portfolio with a lower cash component or a portfolio with a high portfolio beta. Conversely, if they expect a falling market, they can raise his cash component or structure a portfolio with a lower portfolio beta. The market timing ability can be assessed by the following model:

$$R_{p} - R_{f} = \alpha + \beta_{p1} (R_{m} - R_{f}) + \beta_{p2} (R_{m} - R_{f})^{2} + e_{p}$$
(2)

A positive β_{p2} indicates that fund managers do possess superior timing expertise as the curve fitted to the quadratic term gets steeper as it moves to the right. This indicates that as the excess market return is getting larger, the fund manager is shifting the portfolio to higher beta stocks and when the excess market return gets smaller, the fund manager moves to more defensive stocks with lower betas.

3.3 Investment Performance

Tables 3.1(a) to 3.1(c) summarize the various performance measures of open-end and closed-end Asian funds over the last 10 years. For clarity of presentation, we only present the percentage of funds that can outperform the corresponding Morgan Stanley Capital Indices (MSCI) in terms of the Sharpe and Treyor ratios and that have stock selection and market timing abilities.

3.3.1 Offshore open end Asian funds [Table 3.1(a)]

According to the Sharpe ratio, most of the single-country fund groupings have at least 40% of funds that can beat the corresponding MSCI index. For the regional fund grouping, the odds are even better with 69% of the funds beating the benchmark. In terms of the Treynor ratio, five of the 10 single-country fund groupings have at least 40% of the funds beating the corresponding MSCI index. Close to half (47%) of the regional funds can beat the market.

Fund managers are found to perform better in stock selection than in market timing. Seven single-country fund categories have at least 40% of the funds demonstrating stock selection ability. In the case of the regional fund category, 53% of the funds demonstrate this ability. Market timing ability exists, but is only found only in a small number of cases.

3.3.2 US open-end regional funds [Table 3.1(b)]

58% to 80% of the funds can beat the market according to the Sharpe ratio, but the performance is less impressive using the Treyor ratio. For stock selection and market timing abilities, the Pacific Region (excluding Japan) category is able to perform well and is better than the Pacific Region group.

3.3.3 US and international closed-end Asian funds [Table 3.1(c)]

In most cases, managers seems to be able to perform well in managing closed-end funds in terms of risk adjusted return, stock selection and market timing abilities.

Survivorship bias notwithstanding, the results suggest that fund managers investing in Asian funds have done a good job in allocating financial resources to productive uses and hence contributing to resource allocation in the region.

Table 3.1(a) Performance of Asian Funds - Offshore open-end Asian funds^{1, 2} (Total # of funds = 532)

	number of funds	% with stock selection	% with market timing	% beat MSCI (Sharpe)	% beat MSCI (Treynor)
		Selection	unning	(Sharpe)	(Treynor)
Australia	36	44%	42%	64%	42%
China	39	56%	5%	64%	23%
Hong Kong	44	52%	34%	64%	52%
Indonesia	23	17%	26%	26%	13%
India	39	5%	31%	5%	5%
Korea	38	58%	3%	63%	24%
Malaysia	21	43%	38%	48%	48%
Singapore	11	64%	18%	73%	73%
Chinese Taipei	25	68%	4%	48%	10%
Thailand	16	31%	69%	50%	63%
Asia-Pacific					
excluding Japan	240	53%	31%	69%	47%

^{1.} Funds domiciled in tax heavens countries such as Luxembourg, the Cayman Islands, and Bermuda.

Table 3.1(b) Performance of Asian Funds - US open-end Asian regional funds^{1, 2} (Total # of funds = 124)

	number of funds	% with stock selection	% with market timing	% beat MSCI (Sharpe)	% beat MSCI (Treynor)
Pacific region	48	13%	2%	58%	17%
Pacific region					
excluding Japan	76	74%	47%	80%	63%

^{1.} Funds available to US investors and registered with Securities and Exchange Commission in the US.

^{2.} Data source: Lipper Analytical Services.

^{2.} Data source: Lipper Analytical Services.

Table 3.1(c) Performance of Asian Funds - US and international closed-end Asian funds^{1, 2} (Number of funds = 117)

	number of funds	% with stock selection	% with market timing	% beat MSCI (Sharpe)	% beat MSCI (Treynor)
Indonesia	9	55%	45%	55%	55%
India	13	31%	62%	15%	23%
Korea	15	66%	27%	40%	47%
Chinese Taipei	21	71%	19%	38%	71%
Thailand	26	50%	73%	46%	73%
Asia ex. Japan	25	32%	72%	20%	60%
Pacific Basin	8	63%	25%	63%	63%

^{1.} Most of the funds are listed on New York Stock Exchange and London Stock Exchange.

3.4 Industrial Sector Allocation

We study the industrial sector allocation of a sample of Asian funds at the end of June 1996, December 1996, and June 1997. The sample includes both open-end and closed-end funds. Table 3.2 provides the background information of the sample.

Although the sample size is small, we are confident that it can reflect the general asset allocation style and preference of fund managers investing in Asia for the following reasons. In the open-end fund sample, most of the funds are managed in Asia. At June 1997, only six out of the 151 funds were managed outside Asia. Hence, the open-end fund sample provides a good representation of the behavior of fund managers who are more well-informed about Asia than their European and US counterparts, who are more likely to adopt an index tracking investment strategy. The sample is also well represented in terms of international fund management groups. Except in the cases of Chinese Taipei (44 funds) and Thailand (one fund) where the funds are domestic ones managed locally, the majority of the funds were managed in the two major fund management centres in the region, i.e. Hong Kong and Singapore, which have a high concentration of international fund management groups. Examples of prominent fund management groups in our sample include Jardine Flemming, Kleinworth Benson, Baring, Invesco, and Thorton.

In the closed-end fund sample, over 70% of the funds are listed on the New York Stock Exchange and the London Stock Exchange and are available to international investors. Most of the funds are managed by international fund management groups, including Jardine Flemming, Templeton, Morgan Stanley, and Fidelity. A notable exception is the Thai funds, most of which are domestic funds and hence are listed on the Thailand Stock Exchange and managed locally.

^{2.} Data source: Lipper Analytical Services.

Table 3.2 Background Information of Asian Funds-Asset Allocation Study

	Jun 96	Dec 96	Jun 97
Open-end funds ¹ :			
Number of funds	132	136	151
Asset size (US\$ billion)	4.39	5.66	5.45
Closed-end funds ² :			
Number of funds	44	68	74
Asset size (US\$ billion)	6.37	5.85	8.14
All funds:			
Number of funds	176	204	225
Asset size (US\$ billion)	10.76	11.51	13.59

Funds listed by geographical focus as at June-97

Geographic Focus	ocus No. of funds No. (US		% of total
Australia	8	201.7	1.5
China	3	111.0	0.8
Hong Kong	27	2,842.0	20.9
India	15	1,766.4	13.0
Indonesia	18	428.4	3.2
Korea	19	1,432.9	10.5
Malaysia	29	1,205.2	8.9
Philippines	9	375.1	2.8
Singapore	11	269.3	2.0
Taiwan	54	3,614.7	26.6
Thailand	33	1,346.6	9.9
Total	226	13,593.3	100.0

1. Source: Benchmark Limited

2. Source: Lipper Analytical Services

3.4.1 Allocation to sectors important for sustaining economic growth

To sustain economic growth, an economy must allocate resources to building up its capital stock, to improving the quality of human resources, and to upgrading its level of technology. The economic sectors that are related to these sources of growth are the energy, infrastructure, transportation, and property/construction sectors.

In addition to building up capital stock, another source of economic growth is productivity gains. In recent years, some prominent international economists, such as Paul Krugman from MIT, have forecasted a slowdown of Asian economies in the near future.³ They argued that economic growth in East Asia came mostly from investment in capital stock and the availability of cheap labour. Once the capital labour ratio reaches the level of those of developed economies, diminishing returns will set in and economic growth will slow down. To sustain growth, it is crucial for these economies to invest in technology. The industrial sectors that are related to technological advancement are technology, telecommunications, electronics, and, possibly, heavy industry.

Table 3.3 presents the industrial sector allocation of all the funds included in our sample. The largest sector is banking and finance, which is three times as large as the second largest sector, electronics. This is mainly due to the fact that the financial sector accounts for a high share of market capitalization in those economies well represented in our sample⁴, such as Hong Kong, Thailand, and Taiwan. Some of the aforementioned sectors that are deemed to facilitate economic growth appear among the top sectors. They are electronics (2nd), energy (3rd), property/construction (4th and 5th), heavy industry (6th). However, the two sectors that are related to technological advancement, namely technology/telecommunications and infrastructure, only account for 2.78% and 0.22% respectively of total assets. In addition, the transportation sector fails to attract more than 2 % of total assets.

The lack of investment in these three sectors might reflect barriers to cross-border capital flows as these sectors are sensitive or priority sectors in many economies.⁵ In view of the need to increase productivity, there is an urgent need for government to consider securitisation of infrastructure project financing in these sectors.

Over the one and a half year period from June 1996 to December 1997, the share of the banking/finance sector has declined steadily from 27.6% to 18.6%. The sectors that experienced noticeable increase were electronics (from 4.5% to 11.4%) and, to a more moderate degree, property (from 4.5% to 6.3%). Other sectors, however, show little change.

³ See "The Myth of Asia's Miracle, Foreign Affair", Vol. 73, No. 6, 1994, "The Tyranny of Numbers: Confronting the Statistical Realities of the East Asian Growth Experience", *Quarterly Journal of Economics*, August 1995.

⁴ Both Hong Kong and Singapore are actually city economies carrying out the function of financial centres. Thus, it may not be appropriate to impose the conventional wisdom of growth on Hong Kong and Singapore.

⁵ See Regulations on Crossborder Capital Flows in the PECC Economies, Japanese PECC FMD, 1996.

Table 3.3 Industrial Sector Allocation of All Funds¹

Sector	Weighted Average ² (%)	6/96 (%)	12/96 (%)	6/97 (%)
1. Banking/Finance	23.14	27.65	24.35	18.56
2. Electronics	7.91	4.50	7.02	11.37
3. Energy	5.48	5.31	5.58	5.53
4. Property	5.29	4.47	4.88	6.28
5. Building & Constru		6.43	4.77	4.29
6. Heavy Industry	4.90	5.57	4.50	4.72
7. Light Industries	3.83	3.29	3.61	4.44
8. Industrial	3.79	3.60	4.00	3.77
9. Consumer goods/se	ervices 3.78	4.83	3.32	3.35
10. Manufacturing	3.19	3.17	3.29	3.13
11. Communications	2.88	2.88	3.51	2.34
12. Technology	2.78	3.18	2.41	2.77
13. Multi-industry	2.72	3.06	1.63	3.36
14. Metal/Mining	2.71	3.16	2.64	2.40
15. Services	2.17	2.92	2.05	1.68
16. Transportation	1.75	1.92	1.68	1.68
17. Food/Beverages/To	bacco 1.51	1.14	1.50	1.80
18. Trade/Trading serv	ices 1.43	1.22	1.61	1.45
19 Conglomerate	1.43	1.20	1.42	1.62
20. Chemical	1.32	1.48	1.16	1.33
21. Entertainment/Tour	rism 1.27	1.21	1.34	1.26
22. Material	1.07	1.36	0.70	1.15
23. Durables	0.46	0.45	0.32	0.59
24. Infrastructure	0.22	0.12	0.03	0.45
25. Others	9.89	5.88	12.69	10.68

^{1.} Data source: Lipper Analytical Services.

^{2.} The order of the sectors is based on the weighted average over the three sample periods.

3.4.2 Comparison with industrial sector allocation of GDP

An important function of financial intermediaries is to channel savings to finance economic activities. Do fund managers' asset allocation patterns suggest that they adequately allocate their portfolios to sectors that contribute to economic growth? To answer this question, we use the industrial sector allocation of GDP as a benchmark: if fund allocation in a given sector exceeds the GDP allocation, then fund managers are considered as allocating adequate assets in the sector. To the extent that they are successful in this respect, the fund management industry can improve the market depth and liquidity for the sector and help lower the cost of capital. If fund allocation is below GDP allocation, it may be due to the lack of fund raising activity of that sector, or reflect some forms of investment restrictions imposed on the FMCs.

Depending on the stage of an economy's development, the sectors responsible for economic growth differ from one economy to the other. We summarize the sectors that are driving the economies and compare them with the main sectors of funds' investment in Table 3.4 (Appendix 1 gives the detailed tables). The closest match seems to be in Chinese Taipei where the main sectors of economic growth are manufacturing and finance, which are also the main investment sectors for fund managers. There is also a very close match in China. For other economies, there may not be a one-to-one matching, but a broad matching exists. The only notable exception is Thailand, where finance and construction are the dominating sectors for fund investment but it is manufacturing and trade that are responsible for economic growth. Another notable fact is that the construction sector appears in four economies (Hong Kong, Indonesia, Thailand, and the Philippines) as one of the main fund investment sectors but it is not one of the main engines of growth in these economies. This may point to the possibility of over-investment in infrastructure/property development in these economies. While it is unclear whether fund managers are leading this over-investment, they may have a part in fuelling the process.

Table 3.4 Main Growth Sectors and Main Sectors of Investment by Funds

Economy	Driving Sectors ¹	Main Investment Sectors ²
China(Y) ³	manufacturing/primary	manufacturing
Hong Kong(Y)	trade/finance	manufacturing/finance/construction
India (Y)	manufacturing/primary	manufacturing/finance
Indonesia (Y)	manufacturing/primary/trade	finance/construction/ manufacturing
Korea (Y)	finance/construction/ manufacturing	finance/manufacturing/electricity gas & water
Malaysia (Y)	manufacturing/trade/ finance	finance/manufacturing/construction
Philippines (Y)	manufacturing/trade/ construction	construction/finance/ manufacturing
Singapore (Y)	construction/finance/ manufacturing	finance/manufacturing/construction
Taiwan (Y)	manufacturing/finance	manufacturing/finance
Thailand (N)	manufacturing/trade	finance/construction/transport & primary communications

^{1.} Source: Key Indicators of Developing Asian and Pacific Countries.

3.5 Case Study: Thailand

In the case of Thailand, we have the detailed breakdown of the asset allocation for domestic funds and foreign funds. This allows for a comparison of the asset allocation style between international FMCs and domestic FMCs. Among the 14 foreign funds, four are "onshore" foreign fund which are registered locally and managed by the Mutual Fund Public Company. However, the management of these funds is still influenced by the foreign FMCs through their membership in the investment advisory committee of the funds. The rest of the foreign funds are registered outside Thailand and managed by foreign FMCs. As shown in Table 3.5, international fund managers invested a larger proportion of their assets in the two service sectors (banking/finance and non-financial services) than domestic fund managers did. International fund managers also allocated a proportionately greater share of their assets to the manufacturing sector, the largest GDP sector, than their domestic counterparts. In

^{2.} Sources: Lipper Analytical Services, Benchmark Limited.

^{3.} Y means there is a broad match between the sectors that are driving the economic growth and the main sectors of fund managers' investment.

contrast, domestic fund managers invested almost twice as much (as percentage of total assets) in the property/construction sector as did the international fund managers. One of the causes of the currency crisis in Thailand last year was the excessive investment in the property and infrastructure sectors. The results here may suggest that relative to domestic fund managers, international fund managers might be less likely to invest in speculative sectors.

Two policy implications arise from these results. First, the government should assist domestic FMCs to upgrade their risk management controls and strengthen the requirement for information disclosure to investors. Second, there is evidence to suggest that international fund managers, relative to domestic fund managers, are not necessarily driven by short-term profit-taking motives. As the survey results reported in the next chapter show, international fund managers could be even more concerned about the long-term economic prospect of recipient economies. The destabilizing impact of sudden reversals of fund flows by foreign fund managers might be in response to macroeconomic mismanagement or inadequate supervision of the financial sector, as exemplified by the Asian currency crisis last year.

Table 3.5 Asset Allocation Pattern: Domestic vs. International Funds: The Case of Thailand (December 1995)¹

	Domestic	International		
	Funds	Funds		
Asset size	US\$ 6.3 billion	US\$ 2.1 billion		
Number of funds	67	14		
Percentage allocated to:				
Banking/Finance	43.5%	51.2%		
Non-financial Services	2.0%	5.2%		
Manufacturing	4.6%	7.2%		
Property/Construction	23.4%	11.9%		
Technology/Telecoms	12.5%	13.0%		
Energy	6.5%	6.1%		
Primary Industry	0.1%	1.1%		
Others	7.4%	4.2%		

^{1.} Data sources: Domestic funds - The Handbook of Mutual Funds 1996 and survey conducted by HKFMD. International funds - Benchmark Limited and Lipper Analytical Services.

Chapter Four Survey Results

4.1 Introduction

In this chapter, we report the findings of a questionnaire survey of the FMCs in three PECC economies, namely Hong Kong, Australia, and Chinese Taipei. The fund management industries in these economies are at different stages of development. Hong Kong is the fund management centre in the Asia-Pacific region. In contrast, the industry in Chinese Taipei is still in an early stage of development. The Australian market has a more mature fund management industry. However, due to the large size of the local economy, the focus of the industry is more local than international. These differences should be borne in mind in interpreting the survey results. The surveys were conducted during the period from March to July 1997.

The questionnaire covers six areas (the questionnaire is given in Appendix 2).

- Background information
- Research support and training of local fund mangers
- Promotion of fund management products and services
- Location of fund management operations
- Criteria of setting the benchmark investment
- Asset allocation techniques and style

It is believed that the fund management industry can foster the development of the capital market by participating in the local markets, disseminating the concept of group investment schemes to the general public, and raising the professional standards and investment know-how of local fund managers and analysts.

Section 4.2 describes the background of the respondents. Sections 4.3 and 4.4 examine the research support of the FMCs and training provided for their managers and analysts. Section 4.5 presents the results on the promotion of fund management products and services. Section 4.6 explores the key criteria for the FMCs in choosing the location for their operations. Sections 4.7 and 4.8 present the investment styles of the FMCs, and Section 4.9 summarizes the major findings.

4.2 Background Information of the Respondents

Response rates to the three surveys done in Hong Kong, Australia, and Chinese Taipei were quite respectable. The Hong Kong survey covered 27 FMCs. Of these, 22 were members of the Investment Funds Association (IFA) of Hong Kong, which had 47 members at December 1996, and includes most of the important players in the market. Collectively, these 27 FMCs managed US\$76 billion worth of assets at December 1996. Of this amount, US\$44 billion was invested in mutual funds and unit trusts, US\$18 billion in pension funds, and the rest was in private client funds. The US\$44 billion of mutual funds/unit trusts assets under management was roughly equal to that managed by all IFA members during the same period. The majority of the respondents, 21 out of 27, were foreign-based FMCs. This is a

feature of Hong Kong as an international fund management centre.

In the Australia survey, 15 out of the 61 members of Australian Investment Managers' Association (AIMA) responded. The 15 FMCs, of which eight were locally-based and seven foreign-based, managed US\$118.6 billion of assets in 1996, which represented 33% of the total assets managed by all members of the AIMA in the same period.

The response rate to the Chinese Taipei survey is the highest. Of the 21 members of the Securities Investment Trust Advisory Association of Taipei (SITTA), 15 responded. The FMCs in the sample managed US\$14.6 billion of assets, which represented 84% of that managed by all SITTA members. Due to regulatory constraints, all the Chinese Taipei respondents are locally-based FMCs.

4.3 Research Support of Fund Management Houses (Tables 4.1, 4.2, 4.3)

This section examines the FMCs' sources of research support. Through research, not only can FMCs improve the efficiency of their investment, but they can also facilitate the collection and dissemination of relevant information to the financial community. Furthermore, the demand for research support from FMCs can also stimulate the growth of the local brokerage and consulting industries.

The respondents were asked to describe the nature of their research support. The two aspects of interest here are whether the respondents sourced their research support locally or from overseas, and whether the support was provided by in-house research staff or by outside brokerage or consulting companies.

Table 4.1 (Appendix 3 gives the detail tables) indicates that the majority of the FMCs in all three markets relied on research support from both local and overseas. A breakdown of the results (not shown here) between locally-based and foreign-based FMCs reveals two interesting patterns. First, a high percentage of locally-based FMCs from Hong Kong (66%, four out of six) and from Australia (75%, six out of eight) also obtained their research support from abroad. Second, foreign-based FMCs relied as much on local research support as on overseas research support.

Table 4.1 Research Support: Local vs. Overseas

			Ove	erseas	Suppor	<u>t</u>			
	Hong	g Kong		Aust	ralia		Taiw	an	
	Y	N	Sum	Y	N	Sum	Y	N	Sum
Y	20	3	23	11	3	14	12	3	15
N	3	0	3	1	0	1	0	0	0
Sum	23	3	26	12	3	15	12	3	15
		Y Y 20 N 3	Y 20 3 N 3 0	Hong Kong Y N Sum Y 20 3 23 N 3 0 3	Hong Kong Aust Y N Sum Y Y 20 3 23 11 N 3 0 3 1	Hong Kong Australia Y N Sum Y N Y 20 3 23 11 3 N 3 0 3 1 0	Y N Sum Y N Sum Y 20 3 23 11 3 14 N 3 0 3 1 0 1	Hong Kong Australia Taiw Y N Sum Y N Sum Y Y 20 3 23 11 3 14 12 N 3 0 3 1 0 1 0	Hong Kong Australia Taiwan Y N Sum Y N Sum Y N Y 20 3 23 11 3 14 12 3 N 3 0 3 1 0 1 0 0

Among the FMCs that sourced their research support locally, most received support from both in-house research as well as from outside brokerages (Table 4.2). This pattern does not change when the responses are further broken down into locally-based and foreign-based FMCs.

Table 4.2 Companies that Source their Research Support Locally

				<u>Out</u>	side br	okerag	es/advise	<u>rs</u>		
		Hong Kong			Aust	ralia		Taiw	/an	
		Y	N	Sum	Y	N	Sum	Y	N	Sum
<u>In-house</u>	Y	19	2	21	14	0	14	11	4	15
	N	2	0	2	0	0	0	0	0	0
	Sum	21	2	23	14	0	14	11	4	15

Table 4.3 presents the degree of importance of the four types of research support:

- 1. local in-house
- 2. local outside brokerages/advisers
- 3. overseas in-house
- 4. overseas outside brokerages/advisers

Two points are interesting here. First, in the more developed Hong Kong and Australian markets, the degrees of importance assigned to local outside brokerages/advisers and local in-house are very close, while there is a wide gap in the Chinese Taipei market. It appears that in Chinese Taipei, local in-house was perceived as much more important (degree=9.0) than local outside consultancy (degree=5.9). This suggests that the development of the fund management industry requires corresponding support from other financial services. Second, whether it was in the forms of in-house or outside consultancy, research support was perceived as more important when obtained from the local economy than from overseas. Hence, respondents in general held the view that local research support was more important than overseas support, although the degree of difference in importance varied. This reflects that picking individual stocks is still relatively more important than buying the index basket in the investment behaviour of fund managers.

Table 4.3 Importance of Research Support

	Average Degree of I	mportance(0-10)
A. Hong Kong		
	From local economy	From overseas
In-house	8.2	7.1
Outside brokerage/advisors	7.4	6.8
B. Australia		
	From local economy	From overseas
In-house	7.5	5.3
Outside brokerage/advisors	6.9	6.0
C. Taiwan		
	From local economy	From overseas
In-house	9.0	5.0
Outside brokerage/advisors	5.9	5.4

^{1.} The degree of importance is measured on a scale from • to 1•, where "•" stands for "not important at all" and "1•" stands for "most important".

4.4 Training of Local Fund Managers (Table 4.4)

This section covers the training that FMCs offer to their local fund managers and investment analysts. The three types of training are:

- on-the-job-training
- external professional training programs
- in-house training at
 - a) local office
 - b) overseas of fice

In all three markets, over 90% of the FMCs provided on-the-job training to their local fund managers and investment analysts. Besides on-the-job-training, other forms of training were provided. In Hong Kong, over 40% of the FMCs sent their local fund managers to attend external professional training programs (46%), or in-house training programs (42% in local offices and 42% in overseas offices). However, most of these two alternative forms of training were provided by foreign fund management houses. Only one-third (two out of the six) of the locally-based FMCs offered external training programs to their fund managers, and none of them offered any formal in-house training programs.

In Australia, an impressive 93% of the respondents sponsored their fund managers to attend external professional training programs, 67% provided local in-house training, and 27% provided overseas in-house training. In contrast to Hong Kong, local and foreign FMCs

were equally active in providing the other two forms of training. For example, 100% and 75% respectively of locally-based FMCs provided external professional and local in-house training programs. In the Chinese Taipei market, FMCs were quite active in providing external professional training programs (60%), and in-house training programs to their fund managers/investment analysts (40% local in-house, 33% overseas-in house).

The Hong Kong case suggests that foreign-based FMCs contribute to the local capital market by transferring fund management expertise to local managers and investment analysts. In general, the fund management industries in all three markets have played an active role in the training of their fund managers. However, the Hong Kong case may suggest that more formal in-house or external professional training is highly recommended. In fact, some of the foreign FMCs now require people to have a Chartered Financial Analysts (CFA) qualification before they can become fund managers.

Table 4.4 Training of Local Fund Managers

	Hong Kong		Australia			Chinese Taipei			
Number of total								-	
respondents		24			15			15	
Local		6			8			15	
Overseas		18			7			N.A.	
	L^1	O^2	T ³	L	О	T	L	0	T
No. of respondents of	ffering	:							
On-the-job training	6	17	23	8	6	14	14	N.A.	14
External In-house	2	9	11	8	6	14	9	N.A.	9
Local	0	10	10	6	4	10	6	N.A.	6
Overseas	0	10	10	0	4	4	5	N.A.	5
As % of									
	L^1	O^2	T^3	L	О	T	L	О	T
On-the-job training	100	94	96	100	86	93	93	N.A.	93
External In-house	33	50	46	100	86	93	60	N.A.	60
Local	0	56	42	75	57	67	40	N.A.	40
Overseas	0	56	42	0	57	27	33	N.A.	33

^{1.} Local

^{2.} Overseas

^{3.} Total

4.5 Promotion of Fund Management Products and Services (Table 4.5)

This section covers how FMCs promote the concept of unit trusts and mutual funds to investors through their promotional and marketing activities. The respondents were asked to describe the channels that they employed to market fund products to their retail and institutional customers. Five choices were provided:

- Direct sales/marketing
- Exhibition
- Financial intermediaries
- Mass media advertisement
- Seminars and talks

For retail customers, FMCs in all three markets commonly used all the five promotion activities listed above. The only notable exception is that only four companies from Hong Kong marketed their products by direct sales/marketing. This is because FMCs in Hong Kong are prohibited from making cold calls, and direct mail is not a popular way to market fund products there. For institutional customers, only the Chinese Taipei respondents promoted their products mainly by seminars and talks and direct marketing. The Australian respondents also relied mainly on these two methods, but they also used exhibitions. In the Hong Kong market, the most common marketing channel was seminars and talks. Less than one-half of the Hong Kong respondents chose any of the other four approaches. Marketing methods seems to be less imaginative. Electronic commerce may be an innovative method that FMCs should explore.

Table 4.5 Promotion of Fund Management Products and Services

	Hong Kong	Australia	Chinese Taipei
		ber of Respondents	- Internation
To Retail Customers	(out of 14)	(out of 27)	(out of 14)
Through Financial Intermediaries	16	8	10
Seminar & Talks	14	10	9
Exhibition	12	9	9
Mass Media Advertisement	11	10	11
Direct Sales/Marketing	4	9	8
To Corporate Customers	(out of 14)	(out of 27)	(out of 14)
Seminar & Talks	16	10	12
Direct Sales/Marketing	9	12	11
Through Financial Intermediaries	9	5	3
Mass Media Advertisement	8	4	4
Exhibition	3	8	3

4.6 Choice of Location For Fund Management Operations (Table 4.6)

In recent years as developing economies in Asia dismantle capital controls and liberalize their financial systems, the development of the financial sector has become a top policy goal for many of these economies. Many of them have taken a proactive role in promoting the local capital market in the areas of risk management, IPOs, equity trading, offshore money markets, and fund management. Singapore, for example, has taken positive steps in giving tax concessions to attract fund managers to locate their operations there.

This section reports the factors that FMCs would consider in choosing the location to establish a fund management outfit. The responses in this section offer valuable input to policy makers in nurturing an appropriate business environment within which the industry can flourish.

The respondents were asked to assess the degree of importance of the each of the 16 factors that will affect their choice of location to establish a fund management operation in that economy. Based on the average score computed from respondents in all three markets, the results in descending order of importance are given in Table 4.6.

Table 4.6 Location of Fund Management Operations

	Average Degree of Importance
Efficiency Financial Market Services	8.5
Reliable Legal System	8.3
Information and Telecom Technology	8.1
Availability/Quality of Human Resources	8.1
Economic and Political Stability	7.8
Minimum Foreign Exchange Controls	7.6
Reliable Legal Services	7.3
Acceptable Accounting System	7.2
Business Friendly & Lax Regulations	7.1
Proximity to Target Capital Markets	6.9
Proximity to Sources of Fund	6.9
Simple and Low Tax System	6.4
Low Operating Costs - Rent	5.7
Low Operating Costs - Salary	5.5
Proximity to Derivative Markets	4.9
Proximity to Other Fund Management Hou	ses 4.3

^{1.} The degree of importance is measured on a scale from "0" to "10", where "0" stands for "not important at all" and "10" stands for "most important".

The overall message derived from Table 4.6 is that FMCs are most concerned with the economic and legal infrastructure of an economy, as indicated by factors such as the efficiency of financial market infrastructure, the state of information technology, reliability of the legal framework, and availability of well-trained labour. On the other hand, operating costs and business incentives such as low tax rates and business friendly regulations appear to be relatively less important for fund managers. However, these factors have to be interpreted very carefully. For example, high operating costs may be a result of very high demand or productivity gains. Tax incentives may also be highly objectionable as it may lead to a distortion in the price structure. Similarly, proximity to the target capital markets of investment and proximity to the sources of funds would not, by themselves, provide an advantage for the local economy in its bid to attract FMCs. Proximity to other fund management houses is the least important factor, indicating that agglomeration effect does not exist in the fund management industry and FMCs try to stay away from their competitors as far as possible.

4.7 Criteria of Setting the Benchmark Portfolio (Tables 4.7, 4.8, 4.9)

One of the most important trends in developed financial markets these days is the growing importance of institutional investors as individual investors delegate the management of their portfolios to professional fund managers. This trend is gaining momentum in developing countries as well. A closely related trend is the international diversification of institutional investors from the US and Europe as they seek to profit from high returns in emerging markets. These developments have resulted in an upsurge of capital flows into the capital markets in developing economies. The fund management industry has been a conduit that channels the much needed capital to developing economies to finance their rapid economic growth. However, in doing so the industry has also increased the vulnerability of the these economies to volatile shifts in portfolio allocations of international fund managers. To protect the domestic capital market from these disruptive shifts, an understanding of the investment intentions and criteria of fund managers is crucial.

This section describes the criteria, techniques, and styles used in portfolio allocation. Respondents were asked to evaluate the degree of importance of various factors in forming their benchmark portfolio in Asia. These investment criteria were grouped in three categories:

I. Financial market infrastructure

- Market capitalization
- Market liquidity
- Clearing and settlement facilities
- Research support
- Brokerage facilities
- Custodial services
- Availability of derivatives
- Transaction costs

II. Legal and regulatory framework

- Tax system
- Regulatory framework
- Information disclosure
- Corporate governance
- Restrictions on foreign ownership of local companies
- Capital flows controls

III Political and economic factors.

- Long-term economic growth
- Historical performance
- Potential performance
- Economic stability
- Political stability

4.7.1 Category I: financial market infrastructure

In the category of financial market infrastructure, the ranking of the seven factors is quite similar across the three economies. Hence, the discussion below is based on the average score from all three economies. The top three factors are market liquidity, research support, and market capitalization. A large market capitalization allows fund managers a variety of choices, and assures a degree of stability and resiliency in the local capital market in response to shocks to a particular industrial sector. Apparently, market liquidity is also a major concern of fund managers for three reasons. First, they need to adjust their portfolio composition in responses to changes in market conditions. Second, their portfolios are subject to redemption risk from unit trust holders. Third, a liquid market allows fund managers to get in and out without greatly affecting the market price. The high score that respondents assigned to research support underscores the importance of local information and research material for fund managers. This is consistent with the key investment behaviour of picking individual stocks.

They are clearing and settlement facilities, custodial services, and brokerage facilities. Although fund managers are, in principle, investing for the long term, trading related facilities are very important. This may be even more important in emerging markets like Hong Kong and Taiwan. The two least important factors are transaction costs and availability of derivatives. The low degree of importance assigned to availability of derivatives is not surprising as it reflects the general under-development of derivative instruments in Asian capital markets. Hence, fund managers would prefer the option of being able to control their exposure to a market by adjusting the weights of a country's in their benchmark portfolios.

Table 4.7 Investment Criteria: Financial Market Infrastructure

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^{1.} The degree of importance is measured on a scale from "0" to "10", where "0" stands for "not important at all" and "10" stands for "most important".

4.7.2 Category II: legal and regulatory framework

In the category of legal and regulatory framework, the only factor that was well supported by respondents from all three economies is information disclosure. This is consistent with the result that research support is deemed to be an important factor in the financial market infrastructure category.

Besides this factor, respondents from the three economies differ in their assessment of the importance of the other factors. The Hong Kong fund managers were most concerned with capital controls and restrictions on foreign ownership of local companies. The factors which least concerned them were corporate governance and the tax system. To the extent that most of the respondents are foreign FMCs that have exposure to many economies in the region, the results reflect their concerns about restrictions to cross-border capital flows. The low score assigned to the tax system suggests that tax incentive programs may not be the most effective way to attract foreign investment. Corporate governance was not ranked highly probably because this factor is more relevant at the stock selection level than at the benchmark portfolio setting stage.

The responses from the Chinese Taipei and Australian fund managers differed significantly from those from Hong Kong. As most fund managers in these two economies invest mainly in their local markets, their responses are more appropriately interpreted as the point of view of fund managers who are stationed at the target market of investment. Given the domestic-market orientation of the fund managers in these two markets, the importance of the factors capital controls and restrictions on foreign ownership of local companies are played down. They are the two least important factors in this category. Instead, fund managers in these two economies were apparently more concerned about the regulatory framework, corporate governance, and tax system of an economy.

Table 4.8 Investment Criteria: Legal and Regulatory Framework

Average Degree of Importance (0-10)¹

	Hong Kong	Australia	Chinese Taipei
Capital Controls	8.0	4.9	7.3
Information Disclosure	7.8	7.1	8.4
Restrictions on Foreign	7.4	4.7	5.6
Ownership of Local Co.		*	
Regulatory Framework	6.8	6.6	7.3
Corporate Governance	6.6	6.4	7.5
Tax System	5.8	5.7	7.4

^{1.} The degree of importance is measured on a scale from "0" to "10", where "0" stands for "not important at all" and "10" stands for "most important".

4.7.3 Category III: economic and political factors (Table 4.9)

The fund managers in Hong Kong considered political stability and economic growth as the two most important factors. In contrast, historical performance and potential performance were the bottom two factors. Hence, international fund managers appear to take a long-term investment horizon and focus on the fundamentals of an economy. Since the survey was done just before the restoration of sovereignty of China over Hong Kong, it also reflects the skepticism that international investors had on the stability of Hong Kong after the hand-over.

In contrast, although respondents from Australia, and Chinese Taipei were also concerned about political stability and economic growth, potential performance was ranked as the most important factor. Hence, the predominantly local FMCs in these two markets were much more concerned about the effects of politics on stock market performance than the underlying fundamental economic conditions. Finally, the importance that the Chinese Taipei respondents assigned to political stability most likely reflects their concerns with local politics and tensions with China as most of their investments are local.

Table 4.9 Investment Criteria: Economic and Political Factors

	Average Degree of Importance (0-10) ¹				
	Hong Kong	Australia	Chinese Taipei		
Political Stability	8.6	7.0	8.7		
Economic Growth	8.4	7.3	8.4		
Economic Stability	7.4	7.0	8.4		
Historical Performance	7.2	4.9	5.9		
Potential Performance	6.4	8.2	8.8		

^{1.} The degree of importance is measured on a scale from "0" to "10", where "0" stands for "not important at all" and "10" stands for "most important".

4.8 Asset Allocation Techniques and Style (Table 4.10, 4.11)

Fund managers were asked to indicate the asset allocation techniques they used and the degree of importance of the techniques. Five choices were provided: fundamental analysis, macroeconomic analysis, quantitative methods, index tracking, and technical analysis. The Hong Kong and Australian respondents attached the same order of importance to the five asset allocation methods. A positive relationship between the perceived degree of importance of a method and the number of respondents adopting it. Starting with the most important one, they are fundamental analysis, macroeconomic analysis, quantitative method, index tracking, and technical analysis. The results here suggest that fund managers in these two matured fund management centres pay attention to economic fundamentals. Quantitative techniques seem to play a more subordinate role.

Compared with their counterparts in the other two markets, the respondents from Chinese Taipei, however, rely more on technical analysis and index tracking. In addition, fundamental analysis was perceived as the least important although it was the most commonly used method. This is not surprising as it reflects the dominance of the use technical analysis in the stock market.

In terms of the frequency of reviewing their benchmark portfolios, the general picture is that this is done rather frequently. The Hong Kong managers appeared to adjust their portfolios less frequently than their counterparts in Australia and Chinese Taipei. More than half of those in Hong Kong who responded to this question (16 out of 27) indicated that they reviewed their benchmark portfolios on a quarterly basis or shorter. However, nine of the 27 respondents in Hong Kong also indicated that they reviewed their portfolios semi-annually or annually. For Australia, most fund managers (seven out of 11) reviewed their portfolios on a monthly basis. Finally, the Chinese Taipei managers reviewed their benchmark portfolios most frequently. Half of them reviewed their portfolios weekly. Such a frequent review may reflect their more heavy reliance on technical trading techniques and their short-term investment horizon (intraday trade is very common in Taiwan).

Table 4.10 Asset Allocation Technique and Style

Average Degree of Importance (0-10)¹

Asset Allocation Method	Hong Kong	Australia	Chinese Taipei
Fundamental Analysis	8.9 (24)	8.7(12)	3.8(14)
Macroeconomic Analysis	7.3 (25)	7.4(12)	6.9(12)
Quantitative Methods	4.9(22)	5.3 (9)	5.0(6)
Index Tracking	4.9 (21)	5.0 (7)	5.5(10)
Technical Analysis	4.6(21)	3.7(7)	5.9(12)

^{1.} The degree of importance is measured on a scale from "0" to "10", where "0" stands for "not important at all" and "10" stands for "most important".

Table 4.11 Frequency of Reviewing the Benchmark Portfolio

	Number of Respondents			
Frequency	Hong Kong	Australia	Chinese Taipei	
Weekly	5	2	7	
Monthly	6	7	4	
Quarterly	5	2	0	
Semi-annual	4	0	1	
Annually	2	0	1	
Other	5	4	1	

4.9 Summary

We find that in the three economies in the survey the FMCs adopt a diversified approach to obtaining research support. Both locally-based FMCs and foreign-based FMCs obtain their research support both locally and overseas. Local research support is provided both by in-house research and outside consultants. Firms are also active in providing training for their staff. However, local firms in Hong Kong seem to provide less external training and formal in-house training for their staff. In contrast, foreign firms seem to be more active in this area.

The promotion methods of FMCs are not very proactive in that they generally use seminars and talks, and exhibitions in some cases. This may due to local regulations prohibiting firms from marketing their services and products directly.

In choosing a location in which to operate, FMCs are most concerned with factors like efficient financial market services, reliable legal systems, information technology, quality of human resources, and economic and political stability. Operating costs and business tax incentives appear to be relatively less important. Thus, a decent economic, legal, and political infrastructure is more important than tax relief. This gives a clear indication that Hong Kong still has a competitive advantage over Singapore where the government DOES use tax incentives to boost the fund management industry.

In setting the benchmark portfolio, market liquidity, research support, and market capitalization, are the most important market infrastructure factors. Thus, markets that can facilitate trades and offer a variety of choices would command a comparative advantage. Information disclosure turns out to be one of the most important elements affecting the legal and regulatory framework. Economic growth and political stability are considered to be important in the Hong Kong market, while Australian and Chinese Taipei managers are more concerned with potential performance.

The FMCs in Australia, Hong Kong, and Chinese Taipei do not rely too much on quantitative techniques. Fund managers in Hong Kong and Australia use fundamental analysis, but those from Chinese Taipei rely more on technical analysis indicating the difference in the stage of development of the various markets.

Most of the Hong Kong FMCs review their portfolios on a quarterly basis or less, while most of the Australia FMCs review their portfolios on a monthly basis, and most of the Chinese Taipei FMCs perform reviews weekly. This indicates a much shorter investment horizon in Chinese Taipei.

Chapter 5 Policy Recommendations

The fund management industry serves a very important function of channelling both domestic funds and foreign funds to the local market. Such a process could have an impact on the development of the local capital market by enhancing the liquidity of the market, introducing new financial products and services, and improving the investment know-how of the local community. As institutional investors, FMCs should also be in a position to put pressure on companies to disclose more information and enhance the quality of corporate governance; however, for the time being, the effect does not seem to be very strong in the Asian economies.

The current Asian financial crisis has made the role of the fund managers even more important as liquidity has practically dried up in some of the economies that are still haunted by the crisis. It is imperative that FMCs, the conduit for channelling funds to productive means, should assume a more active role in helping these economies recover from the turmoil. It is with this understanding that the following recommendations are made.

There are four broad areas of recommendations: facilitating the establishment of FMCs, especially foreign FMCs; improving the investment know-how of fund managers; strengthening investors' confidence and promoting the transparency of the fund management industry to investors; and enhancing the market infrastructure of the Asian economies in view of the current turmoil.

5.1 Theme 1: To Facilitate the Establishment of FMCs

<u>Recommendation 1</u>: Adopt a step-by-step approach to allow foreign FMCs to participate in managing domestic providence funds and retirement funds. Examples include the CPF in Singapore and EPF in Malaysia.

5.2 Theme 2: To Improve the Investment Know-how of Fund Managers

Recommendation 2: Encourage the adoption of minimum entry qualifications similar to the Chartered Financial Analysts (CFA) for fund managers and fund marketing officers. It is also suggested to make it a mandatory requirement to disclose qualifications of fund managers. Such requirements could then stimulate the market to produce more training and development programs designed especially for fund managers.

<u>Recommendation 3</u>: Boost the research support facilities for fund managers. It is recommended that government regulatory agencies and fund management associations initiate concerted efforts to build and maintain a user-friendly database on regional funds and economic conditions. To further enhance wide dissemination of information, the databases in individual economies should be linked to each other.

<u>Recommendation 4</u>: To establish research grants to study the structure and behaviour of FMCs, and the behaviour of investors.

5.3 Theme 3: To Strengthen Investors' Confidence and Enhance Transparency

<u>Recommendation 5</u>: To promote and facilitate investment in unit trusts and mutual funds by enabling unit holders to access their own personal account data electronically.

<u>Recommendation 6</u>: To promote and foster the provision of fund information, analysis of funds by third parties, and to promote the open ranking of FMCs in terms of both return and risk.

<u>Recommendation 7</u>: To promote the partnering of financial institutions, such as commercial banks with FMCs, with the aims of boosting investors' confidence in FMCs and facilitating the marketing of funds. However, proper warning should be given to investors that such partnering does not give any guarantees as to the safety of their investments.

<u>Recommendation 8</u>: To disclose more information, such as, the fees and remuneration structure to investors.

<u>Recommendation 9</u>: To design fund application materials that are more user friendly and less legalistic. A good example of this is the Australian practice.

<u>Recommendation 10</u>: To standardize the information provided to the public, e.g. the way to compute return and risk.

5.4 Theme 4: To Enhance the Market Infrastructure and to Promote New Products Among Asian Economies

<u>Recommendation 11</u>: To enhance information disclosure, standardization and harmonization of accounting standards.

Recommendation 12: To adopt a common clearing and settlement procedure.

<u>Recommendation 13</u>: To explore the feasibility of cross authorization of funds across different economies.

<u>Recommendation 14</u>: To promote the establishment of regional specialist offshore funds with the participation of international organizations and with the aim of channeling funds to industries that are important to the recovery of the region.

<u>Recommendation 15</u>: To avoid, as far as possible, the distortion of capital flows by legislative means, e.g. restricting the investment of provident funds to a particular market.

Appendix 1: Industrial Sector Allocation: Asian Funds Vs. GDP¹

China: GDP growth 95-96: 15.9%

	% GDP	Own growth	Contribution	% Fund
	1995		GDP growth ²	1996
Primary	20.5%	13.0%	2.7%	N/A
Manufacturing	41.6%	17.4%	7.2%	12.2%
Construction	6.5%	19.6%	1.3%	7.0%
Trade	8.7%	17.6%	1.5%	N/A
Transport and communications	5.5%	17.8%	1.0%	2.5%
Utilities				5.0%
Others	17.1%	13.1%	2.2%	N/A

HK: GDP growth 94-95: 16.6%

_	% GDP	Own Growth	Contribution	% Fund
	1995		GDP growth	1996
Primary	0.1%	-6.7%	0.0%	0.0%
Manufacturing	8.1%	2.7%	0.2%	26.1%
Electricity gas and water	2.1%	6.3%	0.1%	4.3%
Construction	4.5%	7.4%	0.4%	18.2%
Trade	25.1%	11.8%	3.1%	N/A
Transport and communications	9.0%	8.7%	0.8%	1.9%
Finance	22.9%	-0.3%	-0.1%	21.9%
Public administration	15.7%	15.3%	2.4%	N/A
Others	4.2%	3.2%	0.2%	N/A

India: GDP growth 94-95: 14.8%

	% GDP 1995	Own Growth	Contribution GDP growth	% Fund 1996
Primary	29.9%	6.6%	2.1%	2.0%
Manufacturing	19.7%	24.2%	4.4%	39.8%
Electricity gas and water	2.7%	13.9%	0.4%	7.7%
Construction	5.7%	16.8%	1.0%	2.2%
Trade	14.2%	20.5%	2.8%	N/A
Transport and communications	7.7%	15.6%	1.2%	1.7%
Finance	8.7%	12.8%	1.1%	13.6%
Public administration	5.3%	17.2%	0.9%	N/A
Others	6.0%	16.7%	1.0%	N/A

Indonesia: GDP growth 95-96: 16.9%

% GDP	Own Growth	Contribution	% Fund
1995		GDP growth	1996
25.6%	12.5%	3.2%	0.7%
24.2%	21.7%	5.2%	8.7%
1.2%	16.6%	0.2%	7.1%
7.6%	22.7%	1.7%	8.7%
16.8%	16.6%	2.8%	N/A
6.8%	15.5%	1.1%	1.2%
8.8%	17.4%	1.5%	20.1%
5.9%	11.2%	0.7%	N/A
3.1%	17.1%	0.5%	N/A
	1995 25.6% 24.2% 1.2% 7.6% 16.8% 6.8% 8.8% 5.9%	1995 25.6% 12.5% 24.2% 21.7% 1.2% 16.6% 7.6% 22.7% 16.8% 16.6% 6.8% 15.5% 8.8% 17.4% 5.9% 11.2%	1995 GDP growth 25.6% 12.5% 3.2% 24.2% 21.7% 5.2% 1.2% 16.6% 0.2% 7.6% 22.7% 1.7% 16.8% 16.6% 2.8% 6.8% 15.5% 1.1% 8.8% 17.4% 1.5% 5.9% 11.2% 0.7%

Korea: GDP growth 95-95: 10.8%

	% GDP 1995	Own Growth	Contribution GDP growth	% Fund 1996
Primary	6.8%	6.0%	0.4%	3.9%
Manufacturing	26.8%	6.6%	1.8%	15.9%
Electricity gas and water	2.3%	9.1%	0.2%	11.4%
Construction	13.9%	15.3%	2.1%	5.5%
Trade	11.5%	8.0%	0.9%	N/A
Transport and communications	7.3%	13.9%	1.0%	11.7%
Finance	17.1%	12.7%	2.2%	21.2%
Public administration	7.9%	13.7%	1.1%	N/A
Others	6.4%	17.1%	1.1%	N/A

Malaysia: GDP growth 95-95: 8.2%

•	% GDP 1995	Own Growth	Contribution GDP growth	% Fund 1996
		2.10/		
Primary	21.0%	2.1%	0.4%	0.4%
Manufacturing	33.1%	12.8%	4.2%	17.0%
Electricity gas and water	2.3%	12.1%	0.3%	2.5%
Construction	4.5%	9.0%	0.4%	14.5%
Trade	12.3%	9.5%	1.2%	N/A
Transport and communications	7.4%	13.2%	1.0%	0.0%
Finance	10.8%	10.0%	1.1%	18.4%
Public administration	9.5%	4.0%	0.4%	N/A
Others	-0.8%	95.8%	-0.7%	N/A

Philippines : GDP growth 95-95: 14.9%

	% GDP	Own Growth	Contribution	% Fund
	1995		GDP growth	1996
Primary	22.5%	13.6%	3.1%	2.7%
Manufacturing	23.0%	13.1%	3.0%	12.4%
Electricity gas and water	2.6%	17.4%	0.5%	7.3%
Construction	5.6%	19.7%	1.1%	26.8%
Trade	13.7%	12.7%	1.7%	N/A
Transport and communications	4.7%	13.6%	0.6%	1.7%
Finance	4.1%	23.3%	1.0%	21.1%
Public administration	8.1%	17.6%	1.4%	N/A
Others	15.7%	16.0%	2.5%	N/A

Singapore: GDP growth 95-95: 9.5%

	% GDP	Own Growth	Contribution	% Fund
	1995		GDP growth	1996
Primary	0.2%	7.1%	0.0%	0.5%
Manufacturing	26.3%	8.7%	2.3%	22.9%
Electricity gas and water	1.6%	10.5%	0.2%	0.7%
Construction	7.1%	21.6%	1.5%	11.7%
Trade	19.4%	4.7%	0.9%	N/A
Transport and communications	11.6%	4.7%	0.5%	12.8%
Finance	29.6%	12.8%	3.8%	26.9%
Others	4.2%	7.0%	0.3%	N/A

Taiwan: GDP growth 95-95: 8.8%

	% GDP	Own Growth	Contribution	% Fund
	1995		GDP growth	1996
Primary	3.9%	0.2%	0.0%	4.7%
Manufacturing	28.1%	8.5%	2.4%	39.1%
Electricity, gas and water	2.6%	6.1%	0.2%	2.1%
Construction	5.2%	0.0%	0.0%	3.4%
Trade	16.0%	10.7%	1.7%	N/A
Transport and communications	6.6%	11.2%	0.7%	2.3%
Finance	19.1%	11.6%	2.2%	22.5%
Public administration	10.5%	9.1%	1.0%	N/A
Others	8.0%	7.5%	0.6%	N/A

Thailand: GDP growth 95-95: 11.8%

	% GDP	Own Growth	Contribution	% Fund
	1995		GDP growth	1996
Primary	11.9%	10.5%	1.3%	0.8%
Manufacturing	29.0%	13.0%	3.8%	1.9%
Electricity gas and water	2.3%	9.9%	0.2%	13.3%
Construction	7.0%	13.7%	1.0%	14.4%
Trade	16.2%	11.5%	1.9%	N/A
Transport and communications	7.4%	11.1%	0.8%	13.5%
Finance	7.8%	12.5%	1.0%	44.2%
Public administration	3.8%	9.1%	0.3%	N/A
Others	14.6%	10.9%	1.6%	N/A

^{1.} GDP sector allocation data are obtained from Indicator of Developing Asian and Pacific Economies, various issues.

^{2.} This is equal to the product of the own growth rate of the sector (second column) and the share of the sector in GDP.

Appendix 2: Questionnaire

I. BACKGROUND INFORMATION

1.1	Where is the main opera	ting place of y	our paren	nt comp	any? (please	check)	
	□ Local	Overseas:	☐ US ☐ UK ☐ Japar ☐ Othe		se specify)		
1.2	Number and breakdown	of the staff em	iployed in	your lo	ocal office:		
	 a. Marketing b. Compliance c. Administrative (in audition d. Investment Analy e. Fund Managers 	ing and clerica	ıl staff)		• -	nage funds? lease go to Sec ation Decision	
	For investment analysts / following information:	economists (1.2d) and	fund ma	anagers (1.2e), please provi	de the
			Local	Reside	nts	Expatriates	
1	Number						
(Average Qualification (please indicate the % wirniversity degree or above						
	Average Relevant Experi (please indicate in years)	ence					

1.4 Please provide the following information of the funds **managed** under different categories by your company (as of December 1996):

Categories of Funds	Amount of money under management (US\$ million)	Number of Funds	% Sourced from clients in the local economy
a. Mutual Funds / Unit Trusts			%
b. Pension Funds			%
c. Private Clients Funds (individual & institutional)			%
Total Amount:		Box 1	
Out of the aggregate portfolio in box 1 how many % is invested in the local ed		% Box 2	
Please further breakdown the money in following asset types:	evested in the local ec	onomy (box 2 a	above) in the
Stocks	%		
Bonds	%		
Derivatives	%		
Money Market Instruments	%		
Real Estate	%		
Others	%		
TOTAL:	100 %		

II. RESEARCH SUPPORT

2.1 Please check (✓) the source(s) of research support that your company relies on and then indicate how important they are to your company using a scale from 0 to 10.

Not	t Importa	nt							Most	Important
0	1	2	3	4	5	6	7	8	9	10
	Sources (please v		ch Suppo	<u>rt</u>	(plea				ortance tween 0	and 10)
	☐ Local	, In Hous	e							
	☐ Local	, Outside	Brokerag	ge/Adviso	ors					
44	☐ Overseas, In House									
	□ Overs	eas, Outs	ide Broke	erage/Ad	visors					

III. FUND HOUSE MANAGEMENT ASSET ALLOCATION STYLE

- 3.1 For each of the following asset benchmarking criteria in the first column, please indicate
 - how important it is to your company's investment in Asia using a scale from 0 to 10, where 0 = "not important at all" and 10 = "most important".
 - relative to other Asian economies, how well it is met in the local economy.

Asset Benchmarking Criteria:

Degree of Importance in Asset Benchmarking

How well does the local economy meet the criteria?

(please ✓ one of the boxes below)

(please enter a score between 0 to 10 below)

(A) Financial Market Inf	rastructure	Not well at all	Below average	Average	Above average	Excellent
Market Capitalization						
Market Liquidity						
Clearing & Settlement Facilities						
Research Support						
Brokerage Facilities						
Custodial Service						
Availability of Derivatives						
Transaction Costs						
(B) Legal and Regulatory Tax System	Framework	Not well at all	Below average	Average	Above average	Excellent
Regulatory Framework						
Information Disclosure						
Corporate Governance						
Restrictions on Foreign Ownership of Local Companies						
Capital Flow Controls						

(C) Economic and Political Factors	Not well at all	Below average	Average	Above average	Excellent
Long Term Economic Growth					
Historical Performance					
Potential Performance					
Economic Stability					
Political Stability					

	ease check dicate how									
N	ot Importa	ant							Most	Important
() 1	2	3	4	5	6	7	8	9	10
	set Allocati ease ✓)	on Metho	<u>ds</u>			(pleas	e enter			portance een 0 and 10)
□ H □ M □ C □ C	ndex trackindex tracking and amenta from the contraction of the contra	al analysis nalysis omic analy e methods ase specify now often	ysis s, e.g. Mar y do you re	kowitz	's risk a) chmark			.sia?	
	l Weekly l Semi-ann			-	-	-	se spec	ify		
	o you have o Asian eco		of assignir	ng a cer	tain pro _l	oortion	of you	ır globa	l portfol	lio
	□ Yes. I	f yes, how	v much?		%		□ No)		
3.4 Do	Fechnical a Macroecond Quantitative Others (plear meral, here Meekly Semi-ann o you have o Asian eco	nalysis omic analy e methods ase specify now often cually a policy of nomies?	ysis i, e.g. Mar do you re Monthl Annual	kowitz eview y ly [lly [ng a cer	's risk and our bence Quar Quar Other dain prop	chmark terly rs, plea	se spec	lio in A sify ir globa		lio

IV. LOCATION DECISIONS

4.1 Using the following 0 to 10 scale, please indicate the importance of the following factors in deciding where to locate your fund management house.

Not Im	portant								Most	Important
0	1	2	3	4	5	6	7	8	9	10
Factors (please		tion Decis	<u>ions</u>			(pleas	e enter		ee of imposer ber betwe	portance een 0 and 10
Econon	nic and F	Political St	ability							
Busines	ss Friend	lly & Less	Restricti	ve Regu	latory S	tructure	;			
Reliable	e Legal S	System								
Simple	and Low	v Tax Rate	System							
Minimu	ım Forei	gn Exchar	nge Contr	ol						
Availal	oility and	l Quality o	f Human	Resourc	ces					
Informa	ition and	l Telecom	nunicatio	ns Tech	nology					
		ial Marke rokerage s		}						
Reliable	e Legal S	Services								
Accepta	able Acc	ounting Sy	/stem							
Low Op	perating (Cost: Ren	t							
Low Op	erating (Cost: Wag	ges & Sala	aries						
Proxim	ity to Soi	urces of F	unds							
Proxim	ity to Ta	rget Capita	al Market	s (uses o	of funds)				
Proxim	ity to De	rivatives N	Markets							
Proximi	ity to Otl	her Fund N	Managem	ent Hou	ses					

4.2a		wing location(s) in the t has fund manageme	_	• •
	☐ Thailand	☐ Singapore ☐ Hong Kong ☐ South Korea ecify)	□ Taiwan □ Australia	
4.2b		the Asia Pacific region ons in the next two to	•	nd your fund
	☐ Indonesia☐ Thailand	☐ Singapore ☐ Hong Kong ☐ South Korea ecify)	☐ Taiwan ☐ Australia	nd
4.3	In which location(s)	does your group mainta	ain its Asia Pacific he	adquarters?
V. TR	AINING AND PROM	10TION		
	• •	raining to your local me types of training offer	•	□ Yes □ No
	On the job training Overseas in-house Others (please specify		• •	l bodies/universities
		ou have organized or s fund investment to loc		
l (a. Exhibitions b. Seminars & Talks c. Mass Media Advert d. Marketing Through Financial Internedia e. Direct Sales/Direct 	aries, e.g., Banks	Retail Customers	Corporate Customers
Í	f. Others (Please spec	ify)		
*****	******	******	******	*****

This is the end of the survey. Thank you very much for your help. Please attach a name card if yon want a copy of the summary results. We will also seud a copy of the summary results to your respective local investment fund association.

4.2a		wing location(s) in the at has fund manageme		, ,
	☐ Thailand	☐ Singapore ☐ Hong Kong ☐ South Korea ecify)	□ Taiwan□ Australia	
4.2b		the Asia Pacific region ions in the next two to		nd your fund
	☐ Indonesia☐ Thailand	☐ Singapore ☐ Hong Kong ☐ South Korea ecify)	☐ Taiwan ☐ Australia	nd
4.3	In which location(s)	does your group mainta	ain its Asia Pacific he	adquarters?
V. TR	AINING AND PROM	MOTION		
		raining to your local me types of training of fe		□ Yes □ No
		☐ Local in-house☐ External courses o		l bodies/universities
		ou have organized or s fund investment to loc		
(a. Exhibitions b. Seminars & Talks c. Mass Media Advert d. Marketing Through Financial Intermedia e. Direct Sales/Direct	aries, e.g., Banks	Retail Customers	Corporate Customers
f	f. Others (Please spec	ify)		
****	*******	******	******	*****

This is the end of the survey. Thank you very much for your help. Please attach a name card if you want a copy of the summary results. We will also send a copy of the summary results to your respective local investment fund association.

Appendix 3: Research Support

Table A3.1 Research Support

A. All respondents

		Over	seas Suj	pport						
		Hong	g Kong		Aust	ralia		Taiw	an	
		Y	N	Sum	Y	N	Sum	Y	N	Sum
Local	Y	20	3	23	11	3	14	12	3	15
Support	N	3	0	3	1	0	1	0	0	0
	Sum	23	3	26	12	3	15	12	3	15

B. Local respondents

		Over	seas Sup	port							
		Hong Kong			Australia				Taiwan		
		Y	N	Sum	Y	-N	Sum	Y	N	Sum	
<u>Local</u>	Y	3	2	5	6	2	8	12	3	15	
Support	N	1	0	1	0	0	0	0	0	0	
	Sum	4	2	6	6	2	8	12	3	15	

C. Overseas respondents

		Over	seas Sup	port			
		Hong	g Kong		Aus		
		Y	N	Sum	Y	N	Sum
<u>Local</u>	Y	17	1	18	5	1	6
Support	N	2	0	2	1	0	1
	Sum	19	1	20	6	1	7

Table A3.2 Companies that Source Research Support Locally

A. All firms that locally-sourced

		Outside consultant									
		Hong Kong			Australia			Taiwan			
		Y	N	Sum	Y	N	Sum	Y	N	Sum	
<u>In-house</u>	Y	19	2	21	14	0	14	11	4	15	
	N	2	0	2	0	0	0	0	0	0	
	Sum	21	2	23	14	0	14	11	4	15	

B. Overseas-based firms that locally-sourced

		<u>Outs</u>	<u>ide cons</u>	<u>ultant</u>			
		Hong	g Kong		Aust		
		Y	N	Sum	Y	N	Sum
In-house	Y	16	0	16	6	0	6
	N	2	0	2	0	0	0
	Sum	18	0	18	6	0	6

C. Locally-based firms that locally-sourced

		<u>Outs</u>	ide cons	<u>sultant</u>			
		Hon	g Kong		Aust		
		Y	N	Sum	Y	N	Sum
In-house	Y	3	2	5	8	0	8
	N	0	0	0	0	0	0
	Sum	3	2	5	8	0	8

