

Malaysia

International Conference on
Pensions in Asia: Incentives, Compliance and Their Role in Retirement

MALAYSIA:
Pension & Financial market Reforms and
Key Issues on Governance

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Organised
by
PIE and COE/RES, Hitotsubashi University

Hitotsubashi Collaboration Center, Tokyo, Japan, 23-24 February 2004

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Draft: 4 Feb. 2004

ABSTRACT

The mandated contribution rate of Malaysia's Employees Provident Fund (EPF) is high. But as EPF operates both as a retirement fund as well as a multi-purpose savings fund with withdrawals allowed for housing, education and health, there is under-saving for retirement. Therefore, the paper considers the case for an increase in the contribution rate, a restriction on withdrawals and an increase in the retirement age as well as the case for the separate management of funds in different accounts and by different age groups. The adequacy of EPF as a retirement scheme and as a financial performer is discussed in relation to EPF's coverage, its design as a provident fund, the regulations to which it is subject, the under-developed domestic financial markets within which it has to operate as well as to its governance arrangements. The real returns generated by EPF since its inception in 1951 are respectable. But EPF's existing management practices with respect to accounting, performance measurement and dividends declared are distorting behavior and causing mal-governance. The failure to run EPF on a portfolio basis and in the best interest only of its members, has also raised serious governance issues. A key conclusion of this paper is that pension reform can drive capital market development only up to a point. Pension reform also requires a reform of capital markets. The paper discusses the required capital market reforms and their spin-offs for pension reforms.

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(Paper presented at the Conference on "Pensions in Asia: Incentives, Compliance and Their Role in Retirement" organized by the Hitotsubashi University in Tokyo, Japan on February 23-24, 2004.)

I Introduction & Concluding Remarks

In this paper, there is a discussion of the adequacy and performance of Malaysia's Employees Provident Fund (EPF) and its governance. First, there is a review of the performance of EPF as a retirement scheme. Then there is a review of its financial performance. The adequacy of EPF as a retirement scheme and as a financial performer is discussed in relation to EPF's coverage, its design as a provident fund, the regulations to which it is subject, the under-developed domestic financial markets within which it has to operate as well as to its governance arrangements. EPF's mandated contribution rate is high. But as EPF operates both as a retirement fund as well as multi-purpose savings fund with withdrawals allowed for housing, education and health, there is under-saving for retirement. Therefore, the paper considers the case for an increase in the contribution rate, a restriction on withdrawals and an increase in the retirement age as well as the case for the separate management of funds in different accounts and by different age groups. There is also an examination of the implication of the EPF's forced savings scheme on home ownership amongst low income earners. The real returns generated by EPF since its inception in 1951 are very respectable by the standards of other developing countries. But EPF's management practices with respect to accounting, performance measurement and dividends declared depart significantly from best practices that apply to a private sector fund manager. This is distorting behavior and causing mal-governance. The failure to run EPF on a portfolio basis (by restricting its exposure to portfolio risk and not business risk) and in the best interest only of its members, has also raised serious governance issues.

Members of the governing boards of EPF, (which includes its Board of Directors and an Investment Panel), may not be adequately qualified to run a retirement scheme. But they are now more independent of the government, the scheme sponsor, thanks to a lengthening in the term of their appointment from two to three years. However, contributors to the EPF are in no position to discipline the governing boards against bad management because they have no say on the matter. Furthermore, the oversight responsibility of the governing boards over management is not clearly specified and many parameters are outside their control. This is compounded by the fact that the

CEO is also appointed by the Minister of Finance (MOF) as are members of the two governing boards. Further, the CEO is a full-time appointee whereas the governing board members are only part-timers. The well-placed position of management vis-à-vis governing boards was abundantly clear when the Chairman and CEO of the EPF were one and the same person during the 90s. Personal liability of a governing board member is also not well-established in law possibly because he is treated as a “public figure”. The Ministry of Finance (MOF) is the regulator and supervisor of the EPF. But it does not have the requisite expertise to do this job especially given its many other equally important job functions. Where the regulator and the regulated are both government bodies, as in the case of the MOF and the EPF, the regulator has been less able or willing to go public with the criticisms of the regulated.

A key conclusion of this paper is that pension reform can drive capital market development only up to a point. Pension reform also requires a reform of capital markets. There is a real boost for capital market development when pension reform entails a move to a funded scheme. But EPF has been a funded scheme since its inception. The pension scheme for Government employees is now being funded, on a gradual basis, from the late 80s. It is therefore, providing a boost for investments in financial markets but subject, more or less, to the same constraints under which the EPF is belabouring.

II An Overview of Provident Fund (PF) & Pension Schemes in Malaysia

- (a) There are two types of retirement scheme for employees in Malaysia. One is a defined contribution (DC) plan run by the Employees Provident Fund (EPF) for employees of the private sector. The other is a defined benefit (DB) plan run by the government pensions department for employees in government service.
- (b) Malaysia’s EPF, which was established in 1951, is the oldest provident fund (PF) scheme in the world. It is a fully funded scheme. It can be considered as one of the most successful

PFs in the world but subject to the constraints within which it has to operate. The constraints on EPF's performance are imposed by the nature of the PF scheme, by regulation and by financial markets which are under-developed.

- (c) The pension scheme for government employees is now being funded, on a gradual basis, from the late 80s. The corporatisation and privatization of many government entities, such as those in the utility sector, has led to a migration of employees from the DB plan to the DC plan.
- (d) As high as 42% of the country's labour force is not likely to be covered by a retirement scheme. Active contributors to the EPF amounted to 4.78 million in 1999 or 52% of the labour force of 9.18 million. Only 6.2% of the labour force may have been covered by the government pension scheme.¹

III EPF : Key Issues & Proposals

(a) An Overview

The focus of this note is on the EPF which has assets in excess of USD 50 billion. In relative terms, the EPF is one of the largest asset management companies in the world.

- The ratio of its assets to GDP is above 50%.
- The contribution rate to the EPF is mandated and it is high at 23% of salary (with employer:employee share of 12:11 %).

¹ Of government employees of 961,100 in 1999, only 393,134 were classified as active members of the EPF. A substantial proportion of the rest may be classified as inactive members of the EPF. A government employee is emplaced on the pensionable establishment only after he has been in service for a minimum period and contributes to the EPF before he is emplaced on the pension scheme. The inclusion of pensionable government employees partly accounts for EPF's total membership of 9.54 million in 1999 which was above the labour force of 9.18 million.

- It is a forced savings scheme.
- Its investment portfolio is also mandated.
- It operates a DC plan and not a DB plan.
- But it is fully funded.
- Its investment management is centralized.
- But it faces constraints in managing its investment on a portfolio basis.
- It is under-invested in marketable securities.

(b) EPF's investment portfolio is mandated

- At least 70% is to be invested in Malaysian Government Securities (MGS).
- Investment in domestic equities cannot exceed 25%.
- Investment in global or emerging market equities or bonds is not permitted.
- But the Ministry of Finance (MOF) has waived the investment required in MGS (on a year-on-year basis) because of a shortage of MGS.
- EPF is thus over-invested in short-dated instruments. Therefore, it suffers from a massive duration mismatch, (See Table 2), given the clamour for the payment of a higher fixed dividend.

(c) Market & Longevity Risks

EPF's existing arrangement for the investment and pooling of risk offers no protection to a retiring contributor against market or longevity risks. Taking the case of market risk,

- EPF's contributors are of various age groups.
- The risk-bearing capacity of the young (as measured by volatility) is higher than that of the older group,

- But EPF's investment programme (with respect to asset allocation) makes no distinction between each age group,
- Therefore, the young end up with an investment programme which bears too little risk (that is they are under-invested in equities) and the old with too much risk,
- This anomaly has to be rectified.

Market risk with respect to a contributor's retirement fund can be addressed by investing it in less volatile assets as he nears his retirement age. But the retiree still faces the problem of smoothing his income or consumption after his retirement.

- A retiree faces both market and longevity risks,
- A well-developed market in annuity products can address these risks, but only up to a point,
- And the market in annuity products is still extremely under-developed because of over-regulation and over-protection of the insurance and fund management industries.

(d) Under-saving for Retirement & Health Insurance Cover

EPF started off as a retirement fund. Today contributors are also allowed to withdraw up to 40% of their accumulated savings for housing, education and health. With the increase in the withdrawals (See Table 4) for these purposes and declining returns, there may be a shortage of savings for financing one's retirement living.² There is therefore a case for an increase in the contribution rate, a restriction on withdrawals or an increase in the retirement age.

As shown in Table 2a, the EPF contribution rate had doubled to 20% by 1980 from its initial level. By the mid 90s, it had increased further to 23%. At this contribution rate, and on an after-tax basis, the mandated forced savings amounted (as shown in Table 2b), to 20.05% of the salary of an

² Under certain assumptions, Zainal Abidin [See (13)] has calculated that with only 60% of one's contributions going into the retirement fund, the replacement income post retirement is expected to be between 25-30% of a retiree's final salary before retirement.

employee who paid no taxes and 27.4% of the salary of an employee who was on the highest 28% tax bracket. By any reckoning the extent of forced savings at the current contribution rate is very high and as such there is little or no case for any further increase in the level of such forced savings.

A curb in withdrawals for the big ticket spendings³ is also not a solution to the expected shortage in retirement savings. A contributor saves during his working life and dissaves in retirement. He will experience volatility in his consumption (e.g. on health) and investment (e.g. on house purchase and children's education). An optimal retirement plan must smooth his consumption over his life cycle and facilitate lumpy investments, if necessary, by letting him draw on his accumulated fund or borrow against his future retirement contributions so that he can minimize the incidence of over-saving and inequities.⁴

If there is a shortage in retirement savings, the optimal solution is for the employee to be in the work force well beyond the current retirement age of 55. The retirement age has remained unchanged at 55 since the establishment of EPF in 1951. This was in order then as the life expectancy at birth was 55 in 1950 whereas now it is around 75.⁵ It is important to note that the recommendation here is not for an increase in retirement age (if the labour market is to remain flexible) but for an employee to continue to work beyond age 55.

With the increasing privatization of the health industry and increasing life span, there is also a case for an insurance cover to meet medical expenses especially in old age. A compulsory cover through EPF may be the best answer but with deductibles to minimize the problems of adverse selection and moral hazard.

³ However, there is little or no case for permitting withdrawals for the purchase of PCs which are more costly to administer and which are more open to abuse.

⁴ A high mandated contribution rate and restrictions on withdrawals can be inequitable to the extent a contributor is forced to borrow from a bank his own EPF savings which have been recycled to the bank and at a disadvantageous rate as is or as has been the case in Malaysia.

⁵ See Zainal Abidin (See [13]).

(e) Need for Separate Management of Funds in Different Accounts & of Different Age Groups

There is a strong case for a member's retirement fund (which is held in EPF's Account One) to be managed differently from a member's savings balances (held in Accounts Two and Three) and earmarked for housing, education and health. The retirement fund in Account One is a long-term fund whereas the multi-purpose savings fund in the other two accounts is a short-term or a medium-term fund. Accordingly, the asset allocation criteria for the two funds should be different. However, no distinction is made in the management of the two funds presently.

Given the difference in their intended use, the asset allocation decisions for the two funds has to be different. A higher proportion of the retirement fund must be invested in equities and of the multi-purpose fund in bonds and money market instruments.

The short-supply in quality marketable securities of domestic origin also provides a case for the segregation of the funds managed by different accounts and by different age groups. Given this short-supply, there is also a need for a review of the present policy with respect to valuation of assets as well as of allowing retired individuals to keep their funds with the EPF and not to withdraw them on their retirement. The very well-off individuals are the ones who are doing this. This suggest they are still happy with the returns produced by the EPF.

Unrealized gains or losses are not taken into account in EPF's performance measurement or in the dividends declared. The fund is managed and returns are attributed to the account of its individual contributors. This may have led to the selling of winners and the hoarding of the losers, to "outperformance" in the near-term and to a deterioration in the long-term quality of the investment portfolio.

IV An Analysis of EPF's Performance

The data on nominal and real dividend rate paid by EPF is given in Table 1. The real dividend has been positive and significantly above 3% p.a. in the 80s and 90s. It was 3.8% in the first half of the 80s, 6.2% in the second half of the 80s, 4% in the first half of the 90s and 3.6% in the second half of the 90s.

During this period there has been a dramatic shift in EPF's asset composition. See Table 2. The share of MGS declined from 86.3% in 1985 to 34.5% in 2000. On the other hand, the share of loans and debentures (and of corporate bonds) increased from 7.0% (0.0%) to 20.5% (9.4%) and that in equity increased from 3.3% to 21.2%. Significantly, the share in money market instruments (including FDs) increased from 3.4% to 23.1%.

The real returns generated by the EPF is indeed very creditable. However, with the increase in the share of equity and loans in more recent years the data on returns has become less reliable. This is because of weaknesses in EPF's accounting policies. Adherence to best practices would require the equity portfolio to be marked to market and the loan portfolio to be subject to an impairment test (with respect to the carrying value of the loans and the recognition of interest income). As per EPF's annual report the equity investments are being carried at cost. This is in spite of the more than 40% fall in the level of the index from its high in 1997, the sizeable build-up in EPF's equity investments in the pre-boom period and dividend payments only out of realized gains (which would have led to the selling of winners, the hoarding of losers and a deterioration in the underlying quality of the equity portfolio). On account of these factors, the market value of the equity portfolio in 2000 was likely to be about 50% of its carrying value. EPF's annual report is also conspicuous by the lack of mention of its extant accounting policy with respect to loan classification (unlike the case with banks which are required to observe the central bank's GP3 guidelines on such matters). However, as much of EPF's loans are backed by government or bank guarantees and as the central bank has to-date not reneged on the guarantee obligations even of a failing bank, it is unlikely that there has been a serious deterioration in the underlying quality of EPF's loan portfolio. But now there is increasing talk of the introduction of a deposit insurance scheme to protect retail depositors and of large depositors

depositing at their own risk. Then recourse to a bank does not guarantee EPF the credit quality of its loan portfolio. There has been a suggestion that given the decline in the interest rate environment the appreciation in EPF's bond portfolio is likely to offset the fall in the market value of its equity portfolio.⁶

By statute EPF is still required to invest up to 70% of its funds in MGS. This it was able to do until the late 80s because the Federal Government was a big borrower in the domestic debt market until then. However, because of the government's increasing resort to privatization from the late 80s, the Federal Government had come to run a budget surplus in the mid 90s. The captive demand for and a short supply of MGS led to a situation of depressed MGS yields. This adversely affected the interest of EPF contributors given its statutory requirement to invest on a captive basis in such papers. Fortunately, the government has given a waiver on a year-on-year basis and has not insisted on the EPF complying with the letter of the law for its investments in MGS. If it had done so, then even the outstanding supply of MGS would not have been adequate for EPF to meet its legal requirement. The sort of governance issues raised by this requirement for EPF to finance the national development effort is dealt with in Section VI of this paper.

V The Adverse Impact on EPF's Behavior of its Inappropriate Policies in Accounting, Performance Measurement & Dividend Payment

We have noted in the preceding section that EPF's equity investments are not being marked-to-market. Further, EPF has not been required to invest on a portfolio basis. There has been no benchmarking or evaluation of the performance of EPF's investment portfolio against the appropriate market benchmark. Instead EPF's performance has been evaluated in relation to an absolute target return that is not related to how the market has performed or trends in interest rates. We have also noted that the

⁶ However, under the current best practice, an institution such as EPF which is holding its bond portfolio to maturity is not required to mark-to-market its investments in bonds (except in circumstances where there has been a permanent impairment in the underlying quality of the credit of any bond issuers). But EPF is a fund manager, one which allows sizeable withdrawals for several purposes. And the interest rates can increase from its current low level. Therefore, it is in the interest of a contributor even to mark-to-market its bond portfolio.

dividends declared are based on the income earned and on realized gains or losses and not on unrealized gains or losses.

On account of the above considerations, EPF has and can continue to suffer from the following weaknesses:-

- It is and can continue to be under-invested in equities on account of a possible bias towards capital preservation (although equity is the best asset class for a long-term pension fund as demonstrated by Siegel [(8)).
- It has and will continue to treat its contributors differently because of differences in the timing of their withdrawals (with the existing rules favouring the more wealthy or savvy contributors),
- It has or will have a tendency to sell its winners (to book the realized gains so that dividends can be declared) and keep its losers. This can in the long run lead to a deterioration in the quality of its investment portfolio and
- It is or may be vulnerable to undesirable external influences in the decisions it makes and hence to weak governance practices.

EPF does attempt to operate as a portfolio investor. But it has faced a serious constraint in investing in marketable securities and on a portfolio basis:

- as domestic financial markets are under-developed and
- given the restrictions on international diversification and in domestic equities.

Case For A Review of EPF's Investment Policy

The EPF's investment and accounting policy should be adapted, if necessary on a phased basis, to conform to international best practice. EPF's investment policy should be such

- That it should invest its funds on a portfolio basis and in marketable securities to maximize its returns and to minimize volatility (with one-fourth to one-third invested in global and regional securities but these overseas investments should be phased over a period of 10 years) to reap the benefits of diversification and to overcome the short-supply of marketable securities of domestic origin.
- That it should mark-to-market its portfolio (if necessary over a three-year time frame) and
- That it should benchmark and evaluate the performance of its portfolio in relation to the performance of the market (and not in relation to an absolute target return that is not related to how the market has performed).

VI Issues Related to Home Ownership

Under current rules, which came into force in 1996, a contributor to the EPF is permitted to withdraw up to 30% of his existing credit balance to buy a house or to refinance his housing loan as well as to utilise, at five year intervals (reduced to three years from 2000) 30% of the increment to that balance to improve his house or to buy a better house or to reduce the outstanding on his housing loan. For a contributor who was buying a medium or high-cost house, this revised rule was generally more favourable as previously he was permitted to withdraw an amount of not more than 20% of the purchase price or 45% of the member's total credit, whichever was less, subject to a maximum of RM40,000. On the other hand, in respect of a contributor who was buying a low-cost house, the revised rule may or may not be more favourable as the old rule permitted a contributor to withdraw an amount of not more than 40% of the purchase price of the house or the member's total credit whichever was lower.

The revision to the rule was carried out in response to the contention⁷ that the incidence of low home ownership amongst the poorer households was at least partly caused by the inability of such households to utilise their captive savings with the EPF,⁸ that if employees are permitted to make bigger withdrawals and borrow (say from the EPF) against their future contributions to finance their house acquisition this will promote higher home ownership,⁹ and that it will also reduce the inequity in respect of contributors who were able to buy houses on a mortgage from a bank but who faced a higher interest rate of 1.5 to 3% than what they earned as dividends on their EPF balances (or what EPF earned on its very huge surplus funds which it had placed on deposits with the same bank).

A further liberalisation of the rules to permit a higher initial withdrawal as well as at more frequent intervals is in order to ensure that home ownership, especially amongst the poorer households, becomes more widespread. For many individuals, especially first-time house buyers, investing in a house as opposed to the alternative of accumulating a cash balance or financial assets (with EPF or a bank) is likely to be the preferred choice as a hedge against inflation and as a hedge against rising real values of properties as well as to provide shelter in old age. In any case prudence calls for a diversified portfolio of assets.

Using up a contributor's existing balance and future contributions may be questioned on the ground that he will be left with too small an accumulated fund to support himself in retirement. There is no reason why this should be so. In the case of a low-income earner who can be expected to enter the

⁷See R. Thillainathan, Low Home Ownership Among The Poor : A EPF Trap or Opportunity? dated June 10, 1994 (mimeograph) which was written for private circulation to key decision makers in the Government and the private sector.

⁸A low-income earner with a monthly income of RM500, for instance, was being forced to lock-up RM110 a month then (but RM115 now) with the EPF. What was left may have provided his family with a meagre existence and rented accommodation but little else beside. If he had the RM110 plus the money expanded on rental, say of RM100, he could have used that sum for paying his monthly mortgage on his low-cost house.

⁹The Central Provident Fund in Singapore does not impose a restriction on the amount of the accumulated credit a contributor can withdraw to purchase a house developed by the Housing Development Board (HDB) or on the amount of the future contributions he can commit towards repaying a housing loan from HDB so long as he can build up a minimum retirement fund (which was at SGD30,000 in the early 90s) and a minimum medical fund (at SGD10,000 then) by the time he retires from the workforce.

labour force at or before age twenty, and who can enjoy a working life of 35 years (i.e. even if he works only until age 55) he will have about 20 years to accumulate for his old age upkeep even if we assume that during the 15 years that he is making the mortgage payment he does not have any additional savings to build up his retirement fund (which appears very conservative since his earnings can be expected to grow over his entire working life). Furthermore with improving life expectancy (presently placed at 70 years) and tightening labour market, retirement age will increase. This would in turn increase the number of years he can work in accumulating his retirement fund.¹⁰

The growth in a contributor's accumulated fund is set out in Table 3. The calculations have been made for a contributor who buys a low-cost house priced at RM25,000. He is assumed to make a down-payment of RM5,000 from his accumulated fund and take a housing loan of RM20,000 carrying a fixed rate of interest of 9% p.a. His annual loan repayment is RM2,481 of which RM1,500 (i.e. RM125 per month) is financed from EPF withdrawals and the balance (RM82 per month) from his savings on rental payments.

Despite the heavy withdrawals during the 15 year period, the build-up in the accumulated fund is still very substantial. Based on very conservative growth dynamics, his accumulated fund on retirement at age 55 is RM246,558. The extension of his retirement age from 55 to 60 years has a dramatic impact on the size of his accumulated fund nearly doubling it to RM396,272.

The above calculations are based on the current rate of EPF contributions of 23% and on realistic assumptions regarding the annual growth rate in labour productivity of 2%, real returns on investment of 3%, an inflation rate of 3%¹¹ and an inflation risk premium of 1%.¹² These are conservative

¹⁰In a climate of self-reliance that is being promoted in Modern Malaysia, one or one's family has to care for a person during one's old age. In the worst case scenario where one cannot rely on one's family, he has to continue to work and he can only retire if the retirement fund (including assets) that he has accumulated is sufficient to support himself during the period he expects to spend as a retiree. The percentage of income one has to save and the length of time one has to stay in the labour force are related questions.

¹¹The average annual rate of inflation in Malaysia from 1960 to 1990 was 4%.

estimates based on the track record of industrial countries. If the estimates are based on the experience of the dynamic NICs which are more comparable to that of Malaysia the growth rate in labour productivity and real returns will be higher. Based on the assumed inflation rate, the annual growth rate in money wages is 5% and the nominal returns on investment is 7%.

In recent months the Government has acknowledged that a price tag of RM25,000 for a low-cost house is too low, especially in places such as the Klang Valley, Johore Bahru, Penang and East Malaysia. We have accordingly worked out alternative scenarios for home ownership and the size of the retirement fund for a low income family with a monthly income of RM500 to RM1,000¹³ for the two cases where the price tag on the low-cost house is increased to RM30,000 and RM35,000. No changes in assumptions are made with respect to all other variables, including the size of the initial down payment.

As is to be expected, the size of the retirement fund will be higher, the higher the monthly income and the longer one serves in the labour force. However, if the house price is RM35,000 and if the proportion of the funds that can be withdrawn initially is restricted to a maximum of 30% of the accumulated balance, then the family earning a monthly income of RM500 has to wait for 7.5 years before it can hope to purchase the house whereas the family with the same skill level but two earners and therefore with a initial monthly income of 1,000, has to wait for only 4.5 years to purchase the house. Given the expected changes in the level of the house price over time as a result of inflation and the supply-demand dynamics, the family with the lower monthly income will be made worse off by the longer period it has to wait to make the purchase. This unfair disadvantage can be eliminated if a family is permitted to withdraw up to 100% of its accumulated balance and if it is permitted to commit up to 100% of its future contributions to the retirement of the housing loan until such time as the loan has been repaid. This flexibility is justifiable so long as the returns on an investment in

¹²This is the premium which investors require to cushion themselves against high or uneven inflation rates which are not anticipated. The usual premium can be higher than assumed in the text.

¹³This can represent a family of one to two earners depending on the skill level of the earner.

housing exceeds that produced by the EPF. For the case under consideration, but where the annual withdrawal for the servicing of the loan is restricted to RM1,850, the proportion of the accumulated balance that is required as at the end of year six will be 45.1% for the family with a monthly income of RM500 and only 22.6% for the family with a monthly income of RM1,000.

VII EPF's Current Governance Arrangements & Practices

From the 90s the EPF has been managing its fund largely but still not solely in the best interest of its members. The MOF, as the sponsor, regulator and supervisor, as well as the governors and managers of the EPF, still believe that EPF has a development role to play in general and that it cannot ignore the implications of its activities on the country's development more specifically. One widely accepted position is that domestically generated funds should only be used to invest within and for the further development of the country. Therefore, overseas investments by EPF requires government approval and on a case-by-case basis and this has been seldom given. To-date EPF does not have the government's prior approval to allocate a proportion of its funds for investment in overseas equities and bonds. This restriction has been a serious constraint on the activities of EPF in maximizing its returns and minimizing its risk especially given that the size of its fund is huge relative to the size of Malaysia's domestic financial markets.¹⁴ The EPF is also now expected to play a role in the development of the domestic fund management industry as well as to create job and training opportunities in fund management for Malaysians in general and Malays in particular.

Many pension and provident funds in the developing world are governed by a "tripartite" Board of Directors comprising of representatives from the government, employers and employees. In Malaysia, the Board of Directors of a Fund such as that of the EPF has been extended to include an additional

¹⁴ Currently, the size of the EPF funds is about one-third the size of the market capitalization of the Kuala Lumpur Stock Exchange (KLSE). Assume 50% of EPF's funds are allocated to investment in the KLSE or domestic equities. This would make it a 15% shareholder in each listed company. This would not enable EPF to play the role of a passive portfolio investor. The problem is compounded by the fact that EPF is now choosing to observe the "Shariah" principle in its investing activity although at least 50% of the funds belong to members who are non-Moslems. Such a restriction would further increase EPF's shareholding in each of the permitted companies.

group of representatives, namely one drawn from the ranks of professionals. More interestingly, this representative Board, which is appointed by the Ministry of Finance, has oversight responsibilities over a Fund's management on all matters excepting on matters related to its investment activities. The oversight responsibilities on investments have been vested on an Investment Panel (IP). The IP comprises of a member from the MOF, one from the central bank and three professionals with the Fund's Chairman and CEO as its two additional and ex-officio members. The members of the Investment Panel are also appointed by the MOF and are accountable to the MOF and not to the Board.

From the preceding discussion, one can infer that in Malaysia the investment activities of the major Retirement Fund, EPF, is governed more by specialists and not by representatives of employers and employees. However, typically the specialists have been drawn from the banking and accounting profession. And unless they have been long-standing members, they are likely to have only a cursory understanding of financial markets, risk management and actuarial principles. However, they are not likely to have a proper understanding of the intricacies of pension and provident fund management. Furthermore, even if they are in a position to exercise the care, skill and diligence of a prudent person in carrying out their duties, in Malaysia as elsewhere in the developing world, their accountability "is limited by the fact that many of the parameters against which their performance will be measured are outside their control".¹⁵ [(4), p 18]

A Fund governor not only has to be qualified but he also has to be independent from management and the sponsor. The current part-time nature of the appointment of EPF's IP member means that he has oversight but not management responsibilities. However, as the CEO is also a member of the IP, and is appointed by the MOF and not the Board, there is no sharp demarcation between "governing" and "management" functions and responsibilities. It has been suggested that for governors to be

¹⁵ "Investment regulation, contribution rates, funding policies are often established by law and may be inconsistent with the fiduciary responsibilities that are usually attributed to private pension fund governors. Personal Liability of truly independent governors should in principle be established. However, local legislative framework may inhibit the development of such concept for "public" figures. Also, it is likely that personal responsibility of governors of large public pension funds is uninsurable". [(4), pp 18-19]

independent, the government as the sponsor of the Fund, has to “create a transparent and credible mechanism for appointing and electing them” [(4), p 15] with independent bodies, like the Parliament or other expert committees, consulted on the appointments by the sponsor. In Malaysia, the MOF invites nominations from various interested bodies but only for the post of a director in EPF. The appointment to EPF’s Board as well as its IP is made and gazetted by the MOF without any consultation as such. The independence of an appointee to EPF’s Board and the IP has been increased in recent years as the tenor of the appointment has been increased from two to three years.

The independence of a member of EPF’s IP requires him to declare his interest and abstain from voting on any interested party transactions. And this is observed by the EPF in its lending activities. But a member is not required to pre-clear his trades before executing them for their personal accounts or to report on their investment activity on a regular basis.

Good governance requires that the Governing Board be held accountable for its actions and its members be held personally liable. Accountability is a problem in the case of EPF. The contributors are in no position to sanction or discipline the governing body against bad management because there is no competent supervisory authority, there is a very large number of stakeholders and many parameters are outside its control. Personal liability of EPF’s IP member, as a “public” figure, is also not (a well-accepted norm or) well-established in law. Such “public” figures are deemed as enlisted in providing national service on a part-time basis and at a nominal fee. This may make it more difficult to pursue legal actions based on a member’s personal liability. However, public figures in Malaysia have been successfully prosecuted for actions involving a criminal breach of trust.

To hold the governors accountable, the accounting framework for the reporting of financial results must be satisfactory. As per our discussion in earlier sections, EPF’s current accounting practices do not adhere to best practices of the private sector in the fund management industry. With the collapse of the market for financial assets from mid 1997, the decision of the government to continue to measure the carrying value of EPF’s assets at cost and not at market value has led to an over-

statement of its financial performance. Further, the use of inappropriate accounting policies is distorting behavior. It encourages the selling of winners, the hoarding of losers and the overpayment of dividends thereby leading to a deterioration in the underlying quality of EPF's asset portfolio. It also causes an inequitable treatment of contributors with those who are fortunate to make early withdrawals benefiting at the expense of the remaining contributors (again as withdrawal entitlements are based on the cost of EPF's asset portfolio and not at its more depressed market value).

VIII EPF & Governance Issues

In this section we examine the issues related to the governance of a provident fund such as that of Malaysia's Employees Provident Fund (EPF). The goal of a provident fund must be clearly articulated to avoid a conflict between the interests of the contributors and that of the government as the regulator. It is important to note at the outset that a government's "development" goals can often constraint the investment choices of a provident fund. These constraints must be minimised by reference to the efficiency and equity criteria. To align the interests of fiduciaries and contributors, a case is also made in this section for a pension or provident fund to be managed on a portfolio basis with increased reliance on markets.

The issues related to the governance of Employees Provident Fund (EPF) are as follows:-

- (i) A provident fund arrangement is akin to a defined contribution plan but the contribution is mandatory and the investment decision is exercised by the fund but the contributor bears the risk. This is a potentially explosive arrangement. The government has addressed this problem by guaranteeing a minimum return of 2.5% p.a. and by mandating the portfolio in which the funds can be invested. This need not produce an optimal arrangement.
- (ii) It is now generally accepted that the activities of EPF should be geared to further the interests of contributors and not to promote "development". It is also accepted that there should be no

disparity in the treatment of contributors. EPF's regulator and fiduciaries were not as clear of its goal as recently as the late 80s. Even now the so-called "development goals" of the EPF keeps cropping up. For instance, now the EPF is expected to play a role in the promotion of the national fund management industry.

- (iii) There has always been a "conflict of interest" between the Ministry of Finance (MOF) as EPF's regulator and the government as the biggest borrower from the EPF.¹⁶ There is a conflict of interest to the extent that government spending benefits all Malaysians but only private sector employees are mandated by law to contribute to EPF's pool of "forced" savings.

As the Malaysian Government Securities (MGS) issues could only be used to finance development and not operating expenditure and as the government has generally been responsible in its financing and spending decisions the safety of EPF's investments in MGS was seldom in question. However, the captive demand for MGS by EPF and other financial institutions have led, from time to time, to artificially low yields for MGS and hence to lower returns for EPF. With the shortage of MGS, MOF has been prepared to grant a waiver to EPF from the requirement that 70% of its funds be invested in MGS. But the law has not been changed and such waivers have been given on an annual basis. There have been periods when yields on new issues of MGS were significantly below equivalent corporate bond yields and of EPF having or required to invest in such issues nonetheless.¹⁷

- (iv) Restrictions on international diversification and bias for investments in domestic assets or bias for doing businesses with domestically controlled companies or banks can increase risk exposures or weaken risk controls. This is a problem in Malaysia to the extent that the

¹⁶ The law still requires 70% of EPF's funds to be invested in MGS though the Government was running a surplus budget for much of the 90s.

¹⁷ A glaring conflict of interest between the MOF as regulator and the government as the borrower may have been reduced in recent years by MOF's Secretary-General ceasing to be EPF's Chairman as well as with the increase in the number and tenure of office of the independent members.

government's development goals constrains EPF's investment choices. The new regime of exchange control is likely to increase these biases.

- (v) As a result of existing regulation and under-developed financial markets EPF is not able to invest on a portfolio basis. It is then vulnerable to undesirable external influence on its decision making powers. Its portfolio is not required to be marked-to-market and its performance is not evaluated with reference to the performance of the market. This can lead to a disparity in treatment between contributors as well as to non-optimal investments and under-performance.¹⁸
- (vi) There are special problems that crop up in governance and performance when EPF is not a portfolio investor. To illustrate these problems, let us look and see what would have happened if EPF had ventured into the business of property development.

Given the success of Singapore's Housing Development Board (HDB) and its Central Provident Fund in promoting housing development and home ownership, there have been calls on the EPF, (from time to time), to create a Malaysian HDB either directly or through its subsidiary, MBSB.¹⁹ The EPF responded to these calls in the mid 90s but by undertaking only a few low-cost housing schemes and on a restraint basis. But generally, by not promoting or setting up an HDB-type of organisation, the EPF has been able to serve its interest better as it was then able to deal with a more competitive industry in housing development.²⁰ It is in a better position to maximise returns and minimise risks if the funds it plans to allocate to

¹⁸ The EPF (along with the central bank) extended special loans, at below market rates, to its subsidiary, Malaysia Building Society Berhad (MBSB) to finance MBSB's low cost housing programme. As MBSB had other shareholders and as only a few EPF contributors were fortunate to be beneficiaries of MBSB's low cost housing programme, there was no justification, on efficiency or equity grounds, for EPF to extend such loans to MBSB at below market rates. Accordingly, such subsidised loans have been discontinued from the 1990s.

¹⁹ The EPF took over controlling interest in the Malaysia Building Society Berhad (MBSB) from the Federal Government in the 1970s.

²⁰ If the EPF had promoted an HDB-type of organisation through its investing and lending policy, it may then have been biased to lend to the few who have a demand for the houses it developed. It will then be taking not only a lending risk but also a business risk. The alternative is a competitive situation where the EPF can lend to the many who are free to buy from any developer or in any location. This will expose it only to the lending risk.

housing are lent to house buyers who are free to buy houses from any developer, or if it channels its funds by buying loans originated by many financial institutions without regard to who the developer is (as is being done by Cagamas Berhad which is a mortgage corporation), or if it invests in the mortgage bonds issued by Cagamas. If it were to engage in property development directly or lend only to houses it has developed it may not maximize returns and minimize risks. Its decision-making may also be vulnerable to undesirable external influence.

The EPF can play a meaningful role in the provision of housing finance, but the government and EPF have been generally wise in not letting EPF assume a major role in housing development. As a pension/provident fund the EPF should be a portfolio investor and not a direct investor in property development activities and it should take portfolio risk and not business risk.

- (vii) The need for a pension fund to take portfolio risk and not business risk can be well-illustrated by EPF's experience with the running of its only subsidiary, the Malaysian Building Society Berhad, MBSB. In the mid 90s, soon after the appointment of a new Chief Executive Officer (CEO), MBSB strayed away from its core activity of providing housing loans. It started actively marketing bridge finance to developers of commercial properties and acquisition finance to speculative developers for the purchase of land with "development" potential for the construction of houses. It obtained funding for these activities not from the EPF but from depositors (as it had the authority to take such deposits) and from revolving credit lines marked out by banks. The speculative nature of this activity and its unstable funding base drove MBSB into a liquidity and solvency crisis in the aftermath of the Asian financial crisis in mid 1997.

The central bank strictly prohibits the lending of money for the purchase of land. But MBSB was not subject to this prohibition as it was outside the central bank's purview. Some senior managers of the EPF may have aided the management of MBSB in its

aggressive move into these non-traditional areas of activities. There was little or no oversight by EPF's governing boards partly because of the divided responsibilities of its Board of Directors and Investment Panel (as elaborated in the preceding Section) and partly given that the Investment Panel was involved only in deciding on lending and investing activities that were brought to its attention by EPF's management and not in the supervision of EPF's subsidiary or associate.²¹ From this episode the need for EPF to take portfolio risk and not business risk is obvious. There is also a need for a clear demarcation between the oversight responsibilities of EPF's governing board and management responsibilities of its managers.

- (viii) Where EPF is not a portfolio investor and becomes a substantial or controlling shareholder (as in MBSB and STAR, a light rail company and an associate of EPF), EPF's senior management will end up devoting a disproportionate share of their time in running such companies. This was readily evident with respect to MBSB, STAR and EPF's joint ventures for low-cost housing development. EPF's shareholding interest in these companies or ventures were only a fraction of 1% of its total funds. Running a business is very different from investing on a portfolio basis. To have the right focus EPF should only invest on a portfolio basis.

Good governance requires qualified and independent governors who can be held accountable and liable for their actions. We have noted the existing weaknesses in the governance framework of public sector pension and provident funds in Malaysia thanks to weaknesses in the regulatory, supervisory and accounting frameworks. It is easier to bring about a reform of the accounting and

²¹ MBSB's new CEO tabled his five-year business plan to EPF's Investment Panel soon after his appointment. But the plan was severely criticized by some members of the Panel because of its radical departure from MBSB's core activity and because of its failure to address MBSB's unstable funding source. The Panel itself was very guarded in increasing EPF's exposure to MBSB and except to refinance its housing loans on a secured basis. No business plans were submitted to the Panel subsequently. Neither were any progress reports submitted to it on MBSB's business activities. This was done only in the late 90s and in response to searching questions from the Panel on MBSB's request for new lines of credit. It took the Panel many weeks or months to establish the extent of MBSB's foray into speculative lending and the very poor quality of its loan portfolio.

auditing framework of a provident fund to ensure that the measurement and reporting of the performance of such a fund adheres to best practices. This will minimize distortion in the behavior of a fund's fiduciaries. Public opinion can also be mobilized to pressure the government to change governance practices which makes for poor performance. If performance of a fund is over-stated through the use of poor accounting policies, it will be even more difficult to bring about changes in governance practices which are difficult to change in normal circumstances. So in any reform of governance practices priority should be given to the reform of the accounting of a pension and provident fund and the fund should be audited by an external auditor from the private sector who can then be held liable for negligence or fraud.

IX The Inter-Relationship Between Pension and Financial Market Reforms

Where financial markets are under-developed, a pension fund cannot be managed and evaluated primarily on a portfolio basis i.e. with reference to the principles of portfolio management. Unbundling risk, taking a position and hedging will be more complicated. The pension fund may even have to invest in projects or businesses or become a direct lender (as opposed to investing in quoted equities or rated debt issues). This complicates performance evaluation and will increase the demand on scarce skills as well as increase the scope for external interference in decision-making. Exit routes may not be readily available and cutting positions may be difficult or more costly.

(a) Constraints Imposed on Pension Reform by Underdeveloped Financial Markets

Where financial markets are under-developed, and in particular where the market infrastructure is weak with respect to the pricing and execution of trade, clearing and settlement, we also cannot rely on the exit route to further corporate governance best practices.²² Inactive and illiquid markets make

²² For a shareholder to rely on the exit route to protect himself and to recover his investments, the regulatory regime must ensure that all material information that investors need to make decisions are disclosed on a full and timely basis, and that there are safeguards against anti-competitive behaviour and other forms of abusive

exits more difficult and costly. Therefore, minority shareholders (including institutional investors) cannot rely on the exit route to protect themselves against the risk of expropriation or against controlling shareholders who are not maximising shareholder value, but are instead maximising their private benefits of control. This is a problem an institutional investor will encounter in an environment of concentrated shareholding and where there is no market for corporate control.

Where markets are not well-developed, and portfolios are not marked-to-market, a policy of holding a portfolio to maturity or of holding it indefinitely will become commonplace with little or no incentive for a change in this habit. This may encourage unhealthy practices and non-optimal investments as well as cause under or over-payment whenever a contributor makes withdrawals from his accumulated fund. By marking a portfolio to market, we ensure its transparency, proper valuation and accounting, and reduce the incentive of the manager to sweep things under the carpet or to delay actions until it is too late.

Where markets, institutions and hence annuity products are under-developed, prospective retirees will be less well placed to smooth their consumption over their retirement period. This is especially so under a provident fund scheme where contributors end up withdrawing a lump sum on retirement. If contributors are unable to swap their lump sums into annuities, or invest optimally, they run the risk of squandering their retirement fund. The DC plan of a provident fund can be supplemented by a DB, provided the DB plan is fully funded, the investment management is optimal and financial markets are well-developed.

In sum, pension reforms require financial market reforms. We now turn to the nature of the reforms required in certain key financial markets.

(b) Reforms for Promoting Capital Market Development and Potential Spin-offs For Pension Reforms

behaviour by market participants (who may play a key role in regulation and enforcement), that investors are protected from the insolvency of financial intermediaries and that there are adequate controls for systemic risk.

The discussion here is confined to a review of the fund management industry and the debt markets. These are amongst the most under-developed financial markets and activities in the country. Their continued under-development will severely constrain the agenda for pension reforms. A case in point is that the short supply of fixed income products has been a contributory factor in the EPF's under-investment in marketable securities and in constricting the development of a market in annuity products. This section dwells at length on the factors that are holding back the development of an active and liquid market in fixed income products. There is no discussion of the equities market in this section because it is fairly well developed in Malaysia. It is primarily the restriction on the EPF's investment in equities, and the adoption of an incorrect performance evaluation criterion, that have led to the EPF's under-investment in equities. We note in passing, however, that the much higher cost of transaction in the cash market and restrictions on arbitrage activities between the cash and futures markets (because short selling, for instance, is prohibited in the cash market) make it more costly and more risky for the EPF to take a position in a timely manner.

Fund Management Industry

Asia's chronic over-dependence on banking, one which is based more on a relationship-based system and less on market prices or contracts (and this is partly because of its weak legal infrastructure), has increased the risk profile of its economies. This over-dependence on banks has been caused by the over-protection of banks and the over-regulation of capital markets. This has led to the under-development of the fund management industry²³, of financial markets, of risk management products, of risk intermediaries as well as of trading and "market making". It had also led to the under-investment of the EPF in marketable securities and its sub-optimal approach to asset allocation decisions and investment management.

²³ The fund management industry has emerged in the Anglo-Saxon world as the biggest mobiliser of savings, on the one hand, and as the biggest investor, on the other. And securitisation has made this eminently possible.

There are several reasons for the under-development of the fund management industry and hence of financial markets in Malaysia. Firstly, this under-development is due to the capture by the EPF of a sizeable portion of national savings through its forced-savings scheme and the centralised investment of these savings by the EPF.²⁴ Secondly, restrictions on the entry of foreign fund managers as well as on investments (including investments in overseas assets) have curbed the development of the funds management industry. And finally, the guarantee of bank deposits and the favourable tax treatment of interest income on bank deposits have discouraged investments in money market funds as well as in bond and equity issues. The incentive structure for the pooled management of funds has improved substantially in recent years, thanks to the decartelisation of the broking industry and the liberalisation of brokerage commissions.

A reform of the financial sector, including the EPF, is necessary to ensure the balanced development of the fund management industry vis-à-vis the banking industry. For a balanced development of the financial services industry, increasing reliance has to be placed on the financial and capital markets to price, mobilise and allocate savings between competing debt and equity market instruments. The financial and capital market must also price and allocate risks (in the new environment of increased market volatility) between different market players, based on their willingness and capacity to bear the risks. This will, in turn, require the liberalisation and deregulation of financial markets so that traders will be able to hedge and take position or make markets without unnecessary restrictions and without incurring high transaction costs.

With the balanced development of financial markets and adherence to best practices in performance evaluation, the EPF will have the means and the incentives to invest in marketable securities and manage its investments on a portfolio basis.

²⁴ The problem of over-centralisation in savings mobilisation and investment management can be addressed not by breaking up the EPF but by reviewing its asset allocation mix, investment management approach and changing its contribution rate. We have noted that the EPF is under-invested in domestic equities and is not invested in global equities or bonds. Given the benefits of diversification, the problem of persuading the Government and the contributors to adopt the right asset allocation mix has to be addressed as a matter of priority. The role of the EPF is to ensure that adequate investment choices are offered to contributors on a competitive basis.

The Bond Market

The market for bond trading in Malaysia is under-developed because of over-regulation and the pursuit of incorrect policies. The market infrastructure, with respect to trading, clearing and settlement is, however, quite sound. The impact of over-regulation and incorrect policies on bond market trading is set out below.

An improved trading environment is not sufficient for stepping up bond issuing activity. We also require a satisfactory infrastructure for contracting i.e. we require good laws and effective enforcement of these laws. These issues, which are discussed in Thillainathan (1999), are not discussed here, as the primary market in bonds is large. The development of debt markets has also been held up by an overlap in mandates. In the developed world, the securities regulator is responsible for regulating the debt markets. In Malaysia, Bank Negara (the central bank) was the main regulator. Bank Negara's anti-inflation goal and over-reliance on credit control can conflict with the goal of developing a bond market. To remove this conflict the Securities Commission has now been appointed as the sole regulator of the bond market.

The captive demand for, and the shortage of MGS (Malaysian Government Securities), an illiquid cash market and the lack of a futures market in Malaysia (as elsewhere in Asia), has resulted in an under-developed secondary market in MGS. Thus the problem of determining the risk-free interest rate cannot be separated from the problem of pricing credit risk. This has curbed the level of issuing and trading activity in PDS (Private Debt Securities).

If the measures discussed in this subsection for the liberalisation and deregulation of the domestic bond market are implemented, they will boost the level of issuing and trading activity in PDS. There will also be less reason for the EPF to be under-invested in debt securities.

If the Government does not have a need to borrow, it may still have to issue MGS papers periodically as a benchmark for the pricing of fixed rate papers. To serve this purpose better, there is also a need for consolidating existing MGS issues into fewer, larger issues. If Khazanah (the Government Investment Corporation) becomes a regular issuer and its issues set the benchmark yield curve, then the best way to utilise the issue proceeds is to build up a portfolio of foreign assets.²⁵ As Cagamas (National Mortgage Corporation) bonds are near riskless papers, freeing up the market for these papers offers the best solution for the generation of benchmark yields.

To develop an active secondary bond market, it is necessary to free yields, reduce or eliminate reserve and liquidity costs and reduce interest rate risk premium. Liberalisation of the liquid asset requirements²⁶ will have the effect of freeing yields and reducing liquidity costs. Reserve costs can be reduced by reducing reliance on statutory reserves as a tool of monetary policy or by exempting financial institutions from holding reserves against their inventories of fixed rate papers. Improving opportunities for hedging can reduce the interest rate risk premium.

The development of an active and liquid bond market also requires the creation of an institutional framework for the borrowing and lending of securities and the removal of existing restrictions on repo (repurchase) and reverse repo transactions or agreements.²⁷

If the cash and futures markets are well developed, investors and speculators will be able to trade based on their views on interest rates, the shape of the yield curve, the spread between MGS and PDS yields and the spread in yields between the cash and futures markets. This will boost trading volume and market liquidity.

²⁵ This is preferred to its current practice of using its funds as seed capital for picking potential winners.

²⁶ Liberalisation has been implemented under Bank Negara's new liquidity framework. It is still too early to judge the extent of the liberalisation that is likely to materialise.

²⁷ Under a repurchase agreement or "repo", an institution enters into an agreement with a buyer to sell a security for cash and buy it back at a pre-agreed price after a specified period of time. The seller is in fact using the "repo" transaction to finance its investment in the security on a collateralized basis. In a reverse repo transaction, an institution is in fact lending against the collateral of a security. A reverse repo transaction can in fact be used by an institution to borrow a security against the collateral of cash for the purpose of short selling the security.

To accelerate the growth in the PDS market the restriction on the issue of speculative grade bonds has been removed, the shelf registration rule has been introduced to remove the interest rate risks associated with debt issues and the time required for the approval of such issues has also been reduced. But there is also a need for the interest income on debt issues to be exempted from withholding tax, or for cross-currency swaps to be permitted more freely to shift risk and thereby minimise the foreign currency exposures of Malaysian borrowers. The broadening of the investor base for private debt issues is most welcome but to ensure the necessary disclosure of information and due diligence, there should be a requirement for filing of the placement memorandum for such issues with the relevant authorities, as is the case in the US (but without it being subject to their approval). A neutral tax and regulatory regime is also necessary to ensure the balanced development of the debt and equity markets.

*Securitisation*²⁸

The securitisation of debt can reduce the asset-liability mismatches and capital requirements of a bank. It also increases the supply of private debt securities for those wishing to invest in such papers such as the pension funds. To boost securitisation of mortgage loans, which is well developed in Malaysia, the purchase of such loans can now be done (effective from March 1999) on a non-recourse basis to the banks. The restriction on securitisation of loans in respect of houses costing more than RM150,000 has also been lifted (effective from the same date). Approval has been given, effective from December 1998, for the securitisation of other kinds of debts, such as auto loans, lease receivables and credit card payments. The instrument used in the transfer of assets (backing a traditional loan) was exempted, as per Budget 2000, from stamp duty and real property gains tax for a limited period. An indefinite exemption is preferable for the promotion of securitisation. The need for over-collateralisation with respect to the securitisation of auto loans and credit card receivables can

²⁸ Asset Backed Securities (ABS) is a type of bond that involves asset securitisation, that is the conversion of the asset that is, for instance, backing a traditional loan into a tradable instrument. The asset concerned has to be transferred from the owner to a special purpose vehicle established to issue and sell the ABS.

cause difficulties with the Bankruptcy Act, as well as the tax status of a special purpose vehicle. This aspect requires remedial measures.

Cross Currency Swap (CCS) Market

In the absence of a well-developed and liquid domestic bond market, the yield curve generated by the cross-currency swap (CCS) market can be used as the benchmark yield curve for issuing and trading PDS and for boosting their supply. A more active and liquid CCS market will make for a narrower bid-ask spread and a higher transaction volume for each price quote. And the lower the level of capital controls, the higher will be the level of activity and liquidity.

There was an active and liquid CCS market in RM (for tenures of up to seven years) from the last quarter of 1994 until mid 1997 because there were no restrictions on the offer or bid side of a swap or forward transaction. On the other hand, there was a restriction on the offer side (which is equivalent to an outflow control), from 1989 until August 1994, and on the bid side (which is equivalent to an inflow control), from June 1992 until August 1994. Accordingly, the bid-ask spread was around 150 bp (basis points) or 1.5% in 1993, whereas the spread was at or below 25 bp in 1996, and even during the first half of 1997. With the outbreak of the regional financial crisis in mid-1997 and the imposition of an outflow control on the offer side from August 1997, the spreads widened once again to over 100 bp. But during the second quarter of 1998 the spreads narrowed and traded between 50 to 100 bp. With the imposition of the new exchange control regime in September 1998, the CCS market based on deliverable contracts has been shut down.

The yields generated by the CCS market were used as the proxy yields during the mid-1990s for issuing and trading activities in the onshore PDS market. There were restrictions on the extent to which a resident could access the CCS market. However, non-residents could deal freely with the onshore banks during the 1994 -1997 period. Their arbitrage activities between the onshore PDS market and the offshore CCS market were adequate to ensure a narrowing of the onshore and offshore

yields thus enabling more widespread use of the latter as indicative yields for activity in the onshore PDS market.

The international rating of certain Malaysian corporations and the active trading of their debt issues in the global bond market generated valuable information on their risk premiums or credit margins. The domestic rating of the same corporations and of many others, as well as the increasing acceptance of these domestic ratings by both local and foreign institutional investors, have made it easier for these investors to compare and price the debt issues of the various corporations.

It is apparent from the preceding discussion that during the mid-1990s, the CCS market generated the indicative benchmark yields, and the increasing acceptance of rating by issuers and investors generated the risk premiums for the pricing of credit risk. With the two sets of data and available information on US Treasury yields and swap spreads from the global market place, the pricing of ringgit debt issues during that period became less intractable in spite of the absence of a well-developed and liquid domestic government bond market.

So long as the domestic bond market remains under-developed (as is the case in most Asian economies) reliance can be placed on the CCS market to generate a proxy yield curve. This makes it essential for the Malaysian Government to remove restrictions that have led to the shut down of the ringgit CCS market. Unless these restrictions are removed, the lack of a proxy yield curve can curb the level of issuing and trading activity in the private debt securities market.

The removal of this capital control is also necessary to enable investors and borrowers to hedge their interest and exchange rate risks more easily and at lower cost through the CCS market. This will increase overseas interest in investing in Malaysia and reduce the risk of Malaysians who have overseas exposures. This is more necessary where the value of the ringgit is market-determined.

The existence of an offshore CCS market can also give opportunities for market players to seek unique solutions²⁹, arbitrage between the onshore and offshore markets in interest rates and credit spreads (thereby making each market more efficient), as well as take positions or hedge exposures. For instance, after the outbreak of the regional financial crisis, the credit spreads on Malaysian sovereign and quasi-sovereign issues touched a high of 1,200 bp. They are now trading around 200 bp above US Treasuries, compared to the domestic ringgit issues that command much lower spreads over their equivalent benchmarks. If the CCS market had not been shut down and if the EPF had been permitted to invest in and swap these foreign currency issues into RM, then it would have enjoyed a sizeable yield pick-up by investing in these synthetic ringgit assets. At the same time, it would have played a useful role in narrowing spreads on Malaysian risks to more realistic levels.³⁰

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²⁹ See the earlier discussion on the EPF’s duration mismatch and the unique solution that was feasible if a CCS market had continued to exist.

³⁰ During the height of the Asian regional crisis in 1998, there was a collapse in bond prices of quasi-sovereign borrowers, e.g. Petronas (the national oil corporation), with an unprecedented widening in their credit spreads over USTs. There was little or no change in the perception of the domestic credit standing of these borrowers. Therefore, there was a big divergence in the credit spreads of Petronas. This should have led to an arbitrage activity – i.e. domestic investors who are happy with the credit of Petronas would have been better off buying its USD bonds, and then swapping them into a ringgit exposure, thereby enabling the domestic investor to earn onshore and in ringgit the spread that is available on Petronas papers in the offshore market. For this arbitrage activity to take place, what is necessary is a CCS market. And there should be no restrictions on the prudential activities of domestic investors such as the EPF to enter into a swap trade. By doing so the EPF is not assuming a foreign exchange exposure. Neither does it have to take a credit risk that it is not happy with. However, in practice, there were restrictions of one form or another, which prevented or reduced the extent of arbitrage activity that can take place. Therefore, the offshore credit spreads remained at a higher level than it need have been if the domestic investors had the opportunity to arbitrage away the wide differential in the credit spreads between the onshore and offshore markets..

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TABLE 1(a): EPF: REAL RATES OF DIVIDEND - 1956 – 2000 (%)

	<u>Dividend Rate *</u>		<u>Rate of Inflation **</u>		<u>Real Dividend Rate</u>	
	<u>Annual</u>	<u>5 Years Average</u>	<u>Annual</u>	<u>5 Years Average</u>	<u>Annual</u>	<u>5 Years Average</u>
<u>1952</u>	<u>2.50</u>					
1953	2.50					
1954	2.50					
1955	2.50					
<u>1956</u>	<u>2.50</u>		<u>1.0</u>		<u>1.5</u>	
1957	2.50		5.1		-2.6	
1958	2.50	2.8	-1.0	0.4	3.5	2.40
1959	2.50		-2.9		5.4	
1960	4.00		-0.2		4.2	
<u>1961</u>	<u>4.00</u>		<u>-0.2</u>		<u>4.2</u>	
1962	4.00		0.1		3.9	
1963	5.00	4.8	3.1	0.5	1.9	4.25
1964	5.25		-0.4		5.65	
1965	5.50		-0.1		5.6	
<u>1966</u>	<u>5.50</u>		<u>1.4</u>		<u>4.1</u>	
1967	5.50		4.1		1.4	
1968	5.75	5.7	-0.2	1.4	5.95	4.29
1969	5.75		-0.4		6.15	
1970	5.75		1.9		3.85	
<u>1971</u>	<u>5.80</u>		<u>1.6</u>		<u>4.2</u>	
1972	5.85		3.2		2.65	
1973	5.85	6.1	10.5	7.4	-4.65	-1.3
1974	6.60		17.4		-10.8	
1975	6.60		4.5		2.1	
<u>1976</u>	<u>7.00</u>		<u>2.6</u>		<u>4.4</u>	
1977	7.00		4.7		2.3	
1978	7.00	7.3	4.9	4.5	2.1	2.75
1979	7.25		3.6		3.65	
1980	8.00		6.7		1.3	
<u>1981</u>	<u>8.00</u>		<u>9.7</u>		<u>-1.7</u>	
1982	8.00		5.7		2.3	
1983	8.50	8.3	3.7	4.66	4.8	3.84
1984	8.50		3.9		4.6	
1985	8.50		0.3		8.2	
<u>1986</u>	<u>8.50</u>		<u>0.6</u>		<u>7.9</u>	
1987	8.50		0.3		8.2	
1988	8.00	8.2	2.5	1.96	5.5	6.24
1989	8.00		2.8		5.2	
1990	8.00		3.1		4.9	
<u>1991</u>	<u>8.00</u>		<u>4.4</u>		<u>4.0</u>	
1992	8.00		4.7		3.4	
1993	8.00	7.9	3.6	3.96	4.4	4.04
1994	8.00		3.7		4.3	
1995	7.50		3.4		4.1	
<u>1996</u>	<u>7.70</u>		<u>3.5</u>		<u>4.2</u>	
1997	6.70		2.7		4.0	
1998	6.70	6.8	5.3	3.18	1.4	3.6
1999	6.84		2.8		4.0	
2000	6.00		1.6		4.4	
<u>2001</u>	<u>5.00</u>		<u>1.4</u>		<u>3.6</u>	
2002	4.25		1.8		2.45	

TABLE 1(b): EPF: REAL RATES OF DIVIDEND - 1956 – 2000 (%)

	Dividend * Rate	Rate of ** Inflation	Real Dividend Rate
	5 Years Average	5 Years Average	5 Years Average
1956 – 1960	2.80	0.40	2.40
1961 – 1965	4.80	0.50	4.25
1966 – 1970	5.70	1.40	4.29
1971 – 1975	6.10	7.40	-1.30
1976 – 1980	7.30	4.50	2.75
1981 – 1985	8.30	4.66	3.84
1986 – 1990	8.20	1.96	6.24
1991 – 1995	7.90	3.96	4.04
1996 – 2000	6.80	3.18	3.60

Notes

* EPF, 1991 Annual Report

** BNM, Money and Banking in Malaysia, 1989 (For data from 1956 - 85)
____, Annual Reports**TABLE 2a: EPF: RATES OF CONTRIBUTIONS**

	Employee	Employer	Total
1952 - 1974	5%	5%	10%
July 1975 - 1979	6%	7%	13%
Dec 1980 - 1992	9%	11%	20%
1993 - 1995	10%	12%	22%
1996 -	11%	12%	23%

TABLE 2b: EPF CONTRIBUTIONS AS % OF AFTER TAX INCOME

Assume	i)	Income before EPF contributions	100
	ii)	Income after Employer's share of EPF contributions	112
	iii)	Effective Tax Rates	0 - 30%

Compute EPF contributions as % of after tax income?

Effective Tax Rate (i)	After Tax Income (ii)	After Tax Income with Employer's Contributions (iii) = (ii) + 12%	Contributions as % of (iii) (iv) = 23 ÷ (iii)
0	100	112	20.54
1	99	111	20.72
2	98	110	20.91
3	97	109	21.10
4	96	108	21.30
5	95	107	21.50
6	94	106	21.70
7	93	105	21.90
8	92	104	22.12
9	91	103	22.33
10	90	102	22.55
11	89	101	22.77
12	88	100	23.00
13	87	99	23.23
14	86	98	23.47
15	85	97	23.71
16	84	96	23.96
17	83	95	24.21
18	82	94	24.47
19	81	93	24.73
20	80	92	25.00
21	79	91	25.27
22	78	90	25.56
23	77	89	25.84
24	76	88	26.14
25	75	87	26.44
26	74	86	26.74
27	73	85	27.06
28	72	84	27.38
29	71	83	27.71
30	70	82	28.05

TABLE 3: EPF'S ASSET ALLOCATION

NO.	ASSET CLASS	(RM BILLION & %)			
		1985	1990	1995	2000
1.	Malaysian Government Securities (MGS)	86.3	79.2	40.4	34.5
2.	Loans & Debentures (of which Corporate Bonds)	7.0 (0.0)	8.2 (0.7 *)	17.7 (6.0 +)	20.5 (9.4)
3.	Equity	3.3	2.2	11.9	21.2
4.	Property	0.0	0.0	0.4	0.7
5.	Money Market Instruments	3.4	10.5	29.5	23.1
	Total %	100.0	100.0	100.0	100.0
	RM Billion	23.9	45.6	96.6	179.1

Sources:

1. Tan Sri Sallehuddin bin Mohamed, "The Employees Provident Fund: Asset Management and Implications to the Ringgit Bond Market", paper presented at the Conference on Ringgit Bond Market: Institutional Investors Role and Perspectives, October 1, 1996, Kuala Lumpur.
2. The Sun, "The EPF Remains Resilient in Challenging Times", December 2, 2001.
3. Bank Negara Malaysia, Annual Report, 2000.

Notes:

- * The percentage for 1991 is as given in (1) above.
+ The percentage of corporate bonds held by all provident and pension funds is as given in (3) above.

TABLE 4: EPF: CONTRIBUTIONS, WITHDRAWALS & INVESTMENTS

(RM BILLION)

Year	Contributions	Withdrawals *	Accumulated Contributions **	Accumulated Investments ***
1990	4.14	1.74	46.18	45.64
1991	4.92	1.97	52.84	52.00
1992	6.32	1.76	61.71	60.86
1993	7.38	2.21	71.91	71.53
1994	8.79	2.59	83.99	83.31
1995	10.32	3.16	97.54	96.60
1996	12.90	3.64	114.19	115.22
1997	14.52	5.64	130.86	107.42
1998	16.50	8.71	145.89	145.81
1999	18.41	7.37	156.93	163.80
2000	20.95	10.40	167.49	181.51

Source: Bank Negara Malaysia, Monthly Statistical Bulletin, August 2001.

- Notes: * This includes the permitted withdrawals of 30% of ones' accumulated fund at age 50/
 ** Annual figures include dividends. Excludes members' contributions with fund management institutions.
 *** At book value.

Table 5: Contributor's EPF Retirement Fund With Investment in Low Cost Housing – The Life Time Profile

**CONTRIBUTOR'S EPF RETIREMENT FUND
WITH INVESTMENT IN LOW COST HOUSING**

-THE LIFE TIME PROFILE

Assumptions :

Age of entry into workforce	20
Initial annual wage	6,000
Annual increase in wage rate	5%
Annual rate of return	7%
EPF contribution rate	23%
Age of retirement	55/60
Housing loan	20,000
Interest rate on loan	9%
Initial down payment	5,000
Annual Instalment	2,481
Duration of the loan(years)	15

Age	Year	Wage	EPF Contribution	Housing withdrawal	Accumulated Fund
20	1	6,000	1380		1,380
21	2	6,300	1,449		2,926
22	3	6,615	1,521		4,652
23	4	6,946	1,598		6,575
24	5	7,293	1,677		8,713
25	6	7,658	1,761	-5,000.00	6,084
26	7	8,041	1,849	-1,500.00	6,859
27	8	8,443	1,942	-1,500.00	7,781
28	9	8,865	2,039	-1,500.00	8,864
29	10	9,308	2,141	-1,500.00	10,126
30	11	9,773	2,248	-1,500.00	11,583
31	12	10,262	2,360	-1,500.00	13,254
32	13	10,775	2,478	-1,500.00	15,160
33	14	11,314	2,602	-1,500.00	17,323
34	15	11,880	2,732	-1,500.00	19,768
35	16	12,474	2,869	-1,500.00	22,521
36	17	13,097	3,012	-1,500.00	25,609
37	18	13,752	3,163	-1,500.00	29,065
38	19	14,440	3,321	-1,500.00	32,921
39	20	15,162	3,487	-1,500.00	37,212
40	21	15,920	3,662	-1,500.00	41,979
41	22	16,716	3,845		48,762
42	23	17,552	4,037		56,212
43	24	18,429	4,239		64,386
44	25	19,351	4,451		73,343
45	26	20,318	4,673		83,150
46	27	21,334	4,907		93,878
47	28	22,401	5,152		105,601
48	29	23,521	5,410		118,403
49	30	24,697	5,680		132,372
50	31	25,932	5,964		147,602
51	32	27,228	6,262		164,197
52	33	28,590	6,576		182,266
53	34	30,019	6,904		201,929
54	35	31,520	7,250		223,314
55	36	33,096	7,612		246,558
56	37	34,751	7,993		271,810
57	38	36,488	8,392		299,229
58	39	38,313	8,812		328,986
59	40	40,229	9,253		361,268
60	41	42,240	9,715		396,272

-27,500.00

Table 6: Size of Retirement Fund for Case where House Price is RM30,000, Housing Loan is RM25,000 & the Annual (Monthly) Loan Installment is RM2,739 (RM228). (RM)

Initial Income p.m. (RM)	500	600	700	800	900	1,000
Retirement Age (yrs)						
55	226,363	304,086	381,810	459,533	537,256	614,980
60	367,948	487,051	606,155	725,258	844,362	963,465

Table 7: Size of Retirement Fund for Case where House Price is RM35,000, Housing Loan is RM30,000 & the Annual (Monthly) Loan Installment is RM3,054 (RM255). (RM)

Initial Income p.m. (RM)	500	600	700	800	900	1,000
Retirement Age (yrs)						
55	186,442	259,732	337,455	415,179	492,902	570,625
60	311,956	424,842	543,946	663,049	782,152	901,256