Background: How the CPF interest rates and investment scheme work today

1. Today, CPF members grow their CPF savings primarily through the interest paid by the CPF Board.

2. The interest rate on the Ordinary Account (OA) is revised every quarter and is pegged to the short-term interest rates[1] of the major local banks. This is because the funds in OA need to be liquid as they can be withdrawn on-demand by CPF members for purposes such as housing and education. The interest rates on the Special, Medisave and Retirement Accounts (SMRA) are pegged to the longer-term yield of 1% p.a. above the 10-year Singapore Government Securities (SGS). This additional 1% p.a. was intended to approximate the yield of 30-year SGS[2].

3. CPF members therefore receive market interest rates that reflect the liquidity of their CPF savings.

4. A progressive element to the CPF interest rates has been implemented since 2008. An Extra Interest (EI) of 1% p.a. is paid on the first $60,000 of CPF balances[3] to enhance returns for CPF members, especially those with small and medium-sized balances. From January 2016, CPF members aged 55 and above will also earn an Additional Extra Interest (AEI) of 1% p.a. on the first $30,000 of balances[4].

5. These CPF interest rates are risk-free because they are guaranteed by the Singapore Government, which has a triple-A credit rating.

Current options to earn higher returns

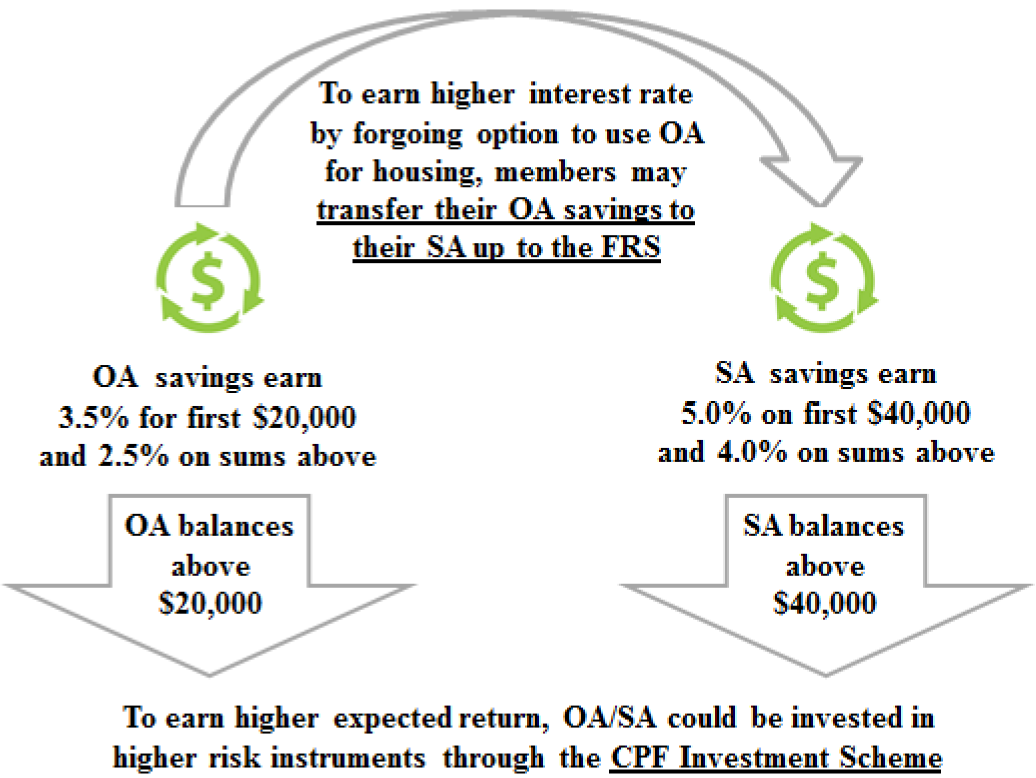
6. Presently, CPF monies in the OA and SMRA are invested in risk-free Government guaranteed bonds, which earn interest rates that are pegged to the aforementioned short-term interest rates and 10-year SGS plus 1% p.a. respectively. To earn higher returns, CPF members have two options. First, CPF members who are prepared to forgo the option of using OA for housing or other permissible uses may transfer some of their OA savings to SA to earn a higher interest rate.

7. Second, if we look at a longer timeframe of 20 to 30 years, a long-term investment with some risk should provide higher expected returns than the CPF interest rates. For CPF members who are prepared to accept higher risk to seek higher expected

[1] The formula to compute the interest rate is 80% of the fixed deposit rate and 20% of the savings rate of the average of the major local banks over the preceding three months.
[2] The 30-year SGS was not yet issued when this peg was introduced in 2007 and implemented in 2008.
[3] Including up to $20,000 from the OA.
[4] This is on top of the EI of 1% for the first $60,000 of balances (including up to $20,000 from the OA). Therefore, CPF members can earn up to 6% in their Retirement Account in 2016.

returns[5], there is currently the CPF Investment Scheme (CPFIS)[6] which was introduced in 1986. Under the CPFIS, CPF members can invest their CPF savings in the OA and SA above the first $20,000 and $40,000 respectively through the CPFIS. There are many investment choices, including more than 200 investment funds, for CPF members to choose from under the CPFIS today. As at end 2015, about $20 billion of OA savings and $5 billion of SA savings were invested through the CPFIS.

8. The different ways that CPF members can currently grow their CPF savings are outlined in the graphic below[7]:



[5] This means that if one invests for the long-term, on average one can earn more returns, but there is a chance that the returns may under-perform.
[6] First launched as the "Approved Investment Scheme" in 1986, which evolved into the CPFIS in 1997.
[7] This graphic applies to CPF members below age 55 who have at least $20,000 in their OA and $40,000 in their SA. For CPF members above age 55, they can transfer their OA savings to their Retirement Accounts instead.

Investment of CPF savings: Current status and key considerations

9. From its review and public consultations, the Panel observed that a significant number of CPF members hope to obtain higher returns from their CPF savings[8]. One indicator is the significant proportion of funds currently invested in the CPFIS. However, the Panel believes that there are limitations in the current system for investment of CPF savings.

10. Firstly, for CPF members who currently invest in the CPFIS, the Panel notes that many of them have not realised investment returns superior to CPF interest rates from their CPFIS investments[9]. This could be due to a number of reasons as briefly explained below.

11. Despite the sizeable amount invested in the CPFIS funds in total, the CPFIS mainly operates under a retail model where funds are marketed by financial institutions and through intermediaries which are sold to individual investors. Individual CPFIS investors therefore do not enjoy economies of scale, and hence investment fees are high. The fees that CPFIS investors pay can be as much as 3% for sales charges and 1.75% for annual fees of the funds invested. These regular fund expenses, fees and sales-related costs significantly erode investment returns. Although the CPF Board has worked to progressively reduce the recurrent annual expense fees, these fees are still relatively high (see Figure 5.1). The Panel notes that given the retail model of CPFIS, there are inherent limits to how much more these costs can be lowered.

Figure 5.1: Maximum Total Expense Ratios for CPFIS Funds[10]

Risk Categories[11] of Funds under CPFIS	TER Caps from 2016 (%)
Higher Risk	1.75
Medium to High Risk	1.55
Low to Medium Risk	0.95
Lower Risk	0.35

[8] Based on a telephone poll conducted in 2015 on behalf of the Panel covering about 1000 randomly selected Singapore residents aged 25 and above.

[9] Approximately 84% of CPFIS-OA investors who realised their investments in FY2015 would have been better off leaving their savings in their OA to earn the default 2.5% interest rate. This observation is based on realised returns of CPFIS investments. The Panel notes that going forward, investment performance under CPFIS could also be evaluated using alternative methodologies, such as including unrealised returns where relevant.

[10] Total expense ratios refer to the ongoing costs of operating a fund, expresses as a percentage of the fund's average net asset value. The costs may include investment management fees, trustee fees and audit fees.

[11] Risk categories are:

i. Higher Risk – Funds that invest in equities.
ii. Medium to High Risk – Funds that invest in a mixture of equities and bonds.
iii. Low to Medium Risk – Funds that invest substantially in fixed income products or bonds.
iv. Lower Risk – Funds that invest in money market products.

12. These costs are amplified when inexperienced CPFIS investors are tempted to buy and sell their investments on a frequent basis, instead of staying invested for the long-term. Furthermore, some CPF investors may follow the crowd when investing – buying into investments when everyone else is buying and prices tend to be high, and selling out of investments during a market downturn when there is panic and prices are at a low. Both behaviours tend to reduce their returns.

13. Secondly, the Panel understands that while many CPF members may be prepared to accept higher risk in the hope for higher expected returns, they **are not sufficiently confident of making active investment decisions[12] or navigating the wide range of investment offerings[13] under the CPFIS**. There are also some CPF members who find evaluating the investment options under the CPFIS too complex and onerous or find it too time-consuming to actively manage their investments. These are CPF members whom the Panel would, for ease of reference only, characterise as the "*simplify investment choices for me*" members.

14. These "*simplify investment choices for me*" members would benefit from an investment option that offers not only simpler investment choices and decisions, but also does not need active rebalancing. The investment choices should be well-diversified and available at a low cost to maximise the potential investment returns nett of fees. About half of the respondents of a poll[14] conducted on behalf of the Panel indicated that they would be interested to invest their CPF savings in such an investment option if it were available. The Panel notes that as at end 2015, an estimated $75 billion in OA and $30 billion in the SA[15] could potentially be invested.

15. Moreover, the amount of investible CPF savings will continue to grow as wages, and hence CPF balances, increase over time. Younger CPF members[16], in particular, are increasingly becoming more aware about investing, and they will have more CPF balances to invest and a much longer investment runway before retirement. **Therefore, the Panel expects an increase in the number of CPF members who desire, and have the potential, to seek higher expected returns by taking some investment risks.**

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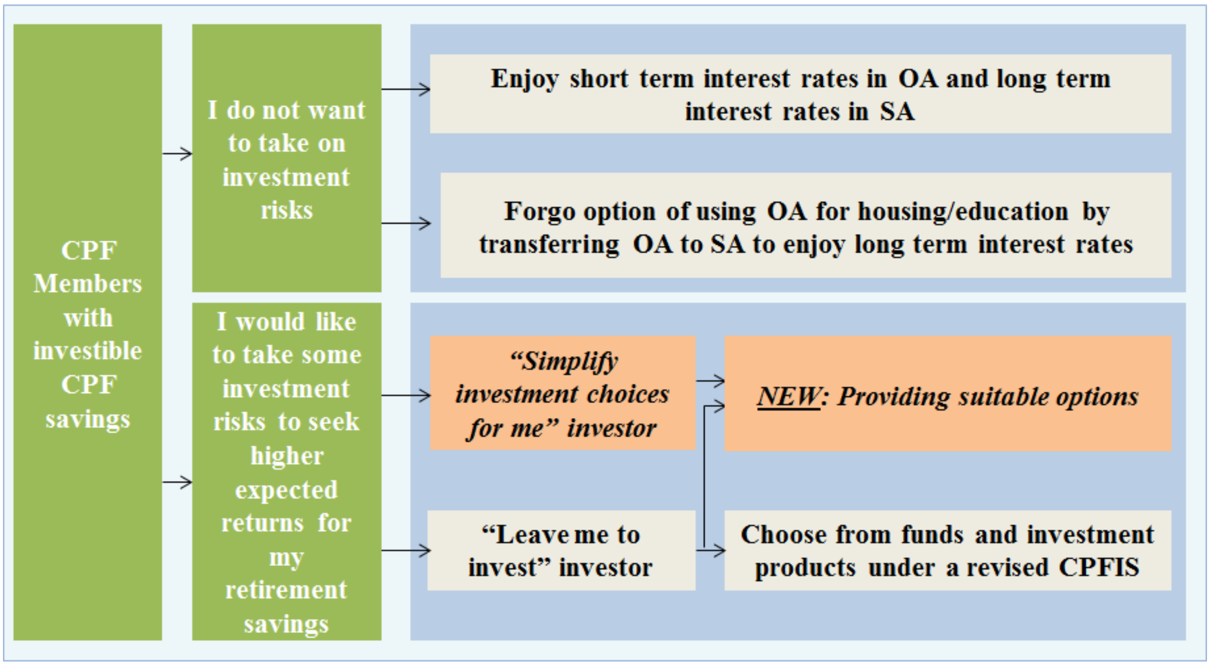
[12] These decisions include: deciding on the appropriate asset allocation (e.g. between equities and bonds), rebalancing the asset allocation as one approaches retirement, and ensuring a sufficiently diversified investment portfolio to manage investment risks.
[13] For example, there are over 200 Unit Trusts and Investment-Linked Products to choose from under CPFIS.
[14] See Footnote 8.
[15] Refers to OA savings above $20,000 and SA savings above $40,000 which can be invested through the CPFIS.
[16] The telephone poll mentioned in Footnote 8 also revealed a higher proportion of younger respondents regarded investing for retirement with moderate to high importance.

16. **Taking these considerations and feedback, the Panel is of the view that, while the CPFIS offers a wide menu of investment products to cater to a broad range of investor expertise and experience, it is not specifically designed to meet the needs of CPF members who wish to invest but feel they lack the financial expertise and/or time and resources to actively manage their investments. The Panel recommends that the Government introduce another simpler investment option better suited to "*simplify investment choices for me*" members. Additionally, the Panel recommends that the Government review the CPFIS to better target it at knowledgeable CPFIS investors who feel confident of managing their investments on their own, and also have the time to do so.** This is illustrated in the diagram below:



Recommendation 12:

- The Panel expects an increase in the number of CPF members who desire, and have the potential, to seek higher expected returns by taking some investment risks.
- The Panel is of the view that the CPFIS is not specifically designed to meet the needs of CPF members who wish to invest but feel they lack the financial expertise and/or time and resources to actively manage their investments.
- The Panel recommends that the Government introduce another simpler investment option better suited to "*simplify investment choices for me*" members.
- Additionally, the Panel recommends that the Government review the CPFIS to better target it at knowledgeable CPFIS investors who feel confident of managing their investments on their own.

Lifetime Retirement Investment Scheme

17. As part of its study on how to provide pooled investment options, the Panel carried out consultations with the public, academics and the financial industry[17]. The Panel also engaged the services of an independent consultant, Mercer, to assist with its study.

18. The Panel also reviewed how other countries invest their retirement savings. To simplify investment choices for their members, the retirement savings systems in many countries limit the number of investment options available to members while ensuring that the options still provide a good mix of risk-return characteristics to cater to different investment risk appetites. Many of these systems also offer default investment options such that if members do not actively make a choice, the default is an investment choice that is reasonable, prudent and would be appropriate to most members. A summary of the key features of other retirement savings systems that the Panel studied can be found in Annex 5-A of this chapter.

19. The Panel deliberated the main principles and considerations that should underpin and inform the design of a new investment option for CPF members, which for the purposes of this report, is referred to as the "Lifetime Retirement Investment Scheme".

Features of the Lifetime Retirement Investment Scheme

Simple investment choices for the majority of CPF members

20. Keeping the *"simplify investment choices for me"* investor in mind, the Panel commissioned Mercer as a consultant to study various approaches (e.g. life-cycle funds and fixed-risk funds) to design a feasible investment option for CPF members who might not be comfortable in making active investment decisions[18]. Mercer's analysis[19] suggested that regular investments in a diversified, low-cost fund over the long-term could likely provide returns that are better than the default CPF interest rates if the investor stays invested for the long-term and thus rides out market fluctuations.

21. A useful example of how the investment decision burden can be reduced for the "*simplify investment choices for me"* investor is a life-cycle investment approach.

[17] A summary of the Panel's public and industry consultations is available in Annex C of the main report.
[18] Refer to Footnote 12 for examples of active investment decisions.
[19] A summary of Mercer's findings can be found in Annex D of the main report.

The Panel notes that many retirement savings systems[20], in most cases after their own comprehensive consultations and reviews, have adopted a life-cycle investment approach as the default investment option for their members. A life-cycle approach takes into account a member's current age and his expected retirement age in order to determine his investment horizon, which is then used to automatically calibrate the amount of asset volatility (which roughly translates to portfolio risk) that the member should be exposed to at different ages of his life. Such an approach typically starts with a higher level of asset volatility (i.e. a higher risk but with a higher expected return) during a member's younger years, and gradually shifts into an allocation that has a lower level of asset volatility (or risk) as the member approaches retirement.

22. Taking simplicity as a core objective, the Panel recommends that the Lifetime Retirement Investment Scheme should **offer a small number of well-diversified funds, which are simpler for CPF members to choose from, and which do not need active rebalancing.**

23. Therefore, CPF members will have three choices for growing their investible CPF savings. One, to remain status quo and keep their monies in the OA and SA. Two, to take some risk and choose from a small number of simple well-diversified investment choices to invest in under the Lifetime Retirement Investment Scheme. Three, to navigate the reviewed CPFIS to actively manage their investments.

<u>Encouraging long-term investing</u>

24. The Panel is of the view that **investing for the long-term is an approach that CPF members should be encouraged to adopt when investing their CPF savings for retirement**. CPF members who stay invested in the Lifetime Retirement Investment Scheme for the long-term have a better chance of riding out the market cycles and earning an annualised return that is potentially higher than the CPF interest rates.

25. **For the Lifetime Retirement Investment Scheme, mechanisms should thus be put in place to discourage CPF members from "churning" their investments** as doing so will likely erode potential returns. As an illustration, such mechanisms used by other retirement savings systems include setting a minimum investment period, limiting the number of switches a member can make within a period of time or imposing penalty fees for investment switches.

[20] Notable examples include the UK (National Employment Savings Trust), Chile, Hong Kong, the US (Federal Thrift Savings Plan) and many 401k funds. 80% of 401k plans have a default option. 3 in 4 of these 401k plans use a target date fund as their default. (Source: Plan Sponsor Council of America).

26. On their part, it would be prudent for CPF members to take a long-term view towards investing for retirement and not attempt to “time the market” and “churn” their investments. During periods of higher market volatility and negative investment returns, which will inevitably occur, they should be conscious that their investments are for the long-term and should not be swayed or affected by short-term market sentiment.

Recommendation 13:

- Taking simplicity as a core objective, the Panel recommends providing a small number of well-diversified Lifetime Retirement Investment Scheme funds, which are simpler for CPF members to choose from. These funds should not need to rely on CPF members to actively rebalance their portfolios and should help them enjoy the benefits of long-term investing. For example, for members with a sufficiently long investment runway, a fund with a life-cycle investment approach could be considered.

Keep the costs of investments low through aggregation

27. The Panel is of the view that **low cost of investing should be one of the key guiding principles for the selection and construction of the funds offered under the Lifetime Retirement Investment Scheme**. This will help to minimise the degree to which fees reduce the potential returns for investors.

28. Today, the CPFIS allows individual CPF members the flexibility to choose the investments that they wish to purchase. However, the Panel notes that **if the CPF savings committed by CPF members to invest in the Lifetime Retirement Investment Scheme are pooled to purchase the investments in bulk, there will be much greater economies of scale, and hence a significant reduction in the costs of investment. This aggregation of savings can therefore reduce the costs to the individual member for his investments.** All things being equal, lower costs will help improve the potential returns on investment.

Manage the Lifetime Retirement Investment Scheme passively

29. The Panel notes that some retirement savings systems use a combination of “active” and “passive” management for their investment options, though there is a growing trend towards passive management.

30. For investment funds that are actively managed, the fund managers make deliberate decisions on which equities or bonds to buy, hold or sell, on behalf of the investor, usually by using extensive fundamental research and analysis. Passively managed funds simply track a market index. Actively managed funds, as a consequence, typically incur significantly higher management fees compared

to passively managed funds, which in turn affect their overall fund performance nett of fees. An increasing body of academic research[21] suggests that it is not easy for actively managed funds to consistently outperform the market over the long-term. While there are some actively managed funds that have done so in the past, it is not easy to consistently predict which funds would outperform the market in the future. As significantly lower fees can be achieved through passive management, and because it is not easy to select active fund managers who will consistently outperform their peers over the long-term, **the Panel recommends that the funds offered under the Lifetime Retirement Investment Scheme be passively managed.**

31. The Panel also notes Mercer's estimate that the annual expense fees from an aggregated and passively managed fund could be 0.5% per year or lower (as compared to CPFIS funds of up to 1.75% per year). Other retirement savings systems, depending on the size of the fund, have even managed to lower the annual expense fees to under 0.2%[22] per year. These cost savings would be translated into higher investment returns for CPF investors.

Recommendation 14:

- The Panel recommends that the cost of investing in the Lifetime Retirement Investment Scheme be kept as low as possible to enhance investment returns.
- Investment fees can be lowered if the CPF savings committed by CPF members to invest in the Lifetime Retirement Investment Scheme are pooled to purchase the investments in bulk, to achieve economies of scale.
- The Panel recommends that the funds offered under the Lifetime Retirement Investment Scheme be passively managed.

32. **In conclusion, the Panel is of the view that Government should offer the Lifetime Retirement Investment Scheme as a simpler and more suitable investment option compared to the CPFIS, for the majority of CPF members. This will enable more CPF members, who are prepared to accept some investment risk, to invest to seek higher expected returns on their CPF savings.**

[21] Bibliography of research is available in Annex 5-B of this chapter.
[22] The asset-weighted expense ratio for passive funds in 2014 (Morningstar's 2015 Fee Study).

Maintain the CPF investment limits for OA and SA savings

33. For CPF members' OA savings, the first $20,000 of OA savings should remain in the OA because CPF members may require these savings for various short-term needs such as housing and education. For example, the first $20,000 of OA savings provides a useful buffer in the event that a CPF member falls into unemployment for a short period and still has to service regular mortgage payments from his OA.

34. For CPF members' SA savings, the first $40,000 of SA savings should remain in the SA, because the first $40,000 in SA earns an attractive interest rate with an Extra Interest of 1% per annum.

35. With rising incomes, the Panel notes that an increasing number of CPF members will accumulate CPF savings in excess of the investment limits at a younger age. For example, 6 in 10 active CPF members aged 45 today have SA savings in excess of $40,000, and this proportion is estimated to increase to 9 in 10 active CPF members aged 45 in 2030. If these CPF members participate in the Lifetime Retirement Investment Scheme and stay invested for the long-term, they would have an investment runway of at least 20 years which would allow them to ride out the market cycles and earn a higher expected return.

36. The Panel therefore encourages such younger CPF members who reach the investment limits to actively think about their financial needs and expectations in retirement, and to seriously consider investing through the Lifetime Retirement Investment Scheme to achieve a higher expected return, while taking on some investment risk.

Recommendation 15:

- The Panel recommends maintaining the current CPF investment limits that apply for OA and SA savings.
- The Panel notes that an increasing number of CPF members will reach these investment limits at a younger age, and encourages such CPF members who have a long investment runway to consider investing in the Lifetime Retirement Investment Scheme in order to achieve a higher expected return.

Turning investments into retirement payouts

37. Since the aim of investing CPF monies is to boost their retirement income, the Panel notes that CPF members who choose to invest in the Lifetime Retirement Investment Scheme should eventually liquidate a part or whole of their investments in the Lifetime Retirement Investment Scheme to purchase their CPF LIFE plan, typically up to the Basic Retirement Sum (with a property charge) or the Full Retirement Sum. The Panel is of the view that the CPF members who invest in the Lifetime Retirement Investment Scheme should not be required to liquidate their investments at their CPF Payout Eligibility Age (PEA) but be allowed some flexibility to do so over a period time to mitigate the risk that their PEA coincides with a market downturn, while still ensuring their ability to start their CPF LIFE payouts by their chosen Payout Start Age (up to the age of 70). This is in line with the Panel's earlier recommendation in Part One of the report to allow CPF LIFE payouts to be deferred up to age 70.

Actively provide public education about the Lifetime Retirement Investment Scheme and channels through which interested CPF members can find out more

38. It is likely that many CPF members will not be familiar with investing their CPF savings and the Lifetime Retirement Investment Scheme. This is particularly so for the "*simplify investment choices for me*" member who may wish to invest his CPF savings but is not confident of making investment choices.

39. As such, the Panel recommends that the Government proactively promote awareness and understanding of the Lifetime Retirement Investment Scheme to eligible CPF members, and to create channels that could assist interested CPF members in finding out more about the Scheme.

40. In particular, eligible CPF members should be actively asked and reminded to choose between the CPF interest rates scheme and the Lifetime Retirement Investment Scheme. This would also serve as a reminder for such CPF members to think long-term about their retirement needs and plan for the financing of their retirement earlier.

Recommendation 16:

- The Panel recommends that the Government proactively promote awareness and understanding of the Lifetime Retirement Investment Scheme to eligible CPF members.
- Eligible CPF members should be actively asked and reminded to choose between the CPF interest rates scheme and the Lifetime Retirement Investment Scheme.

Establish an Expert Investment Council

41. As the setting up and implementation of the Lifetime Retirement Investment Scheme can be complex, the Panel is of the view that there are benefits to establishing an expert investment council that would advise the Government on the scheme parameters of the Lifetime Retirement Investment Scheme. For example, the expert investment council could advise on the appropriate levels of investment risks and the asset allocation of the funds offered to CPF members.

42. Therefore, **the Panel recommends that the Government establish an expert investment council to advise on the set-up and implementation of the Lifetime Retirement Investment Scheme.**

Recommendation 17:

- The Panel recommends establishing an expert investment council to advise on the set-up and implementation of the Lifetime Retirement Investment Scheme.

ANNEX 5-A: Examples of Features in International Retirement Savings Systems

The table below summarises the investment features offered by retirement savings systems in other countries.

	Australia	**Chile**	**Hong Kong**	**United Kingdom (NEST)**[1]	**United States (TSP)**[2]
Number of Investment Options	5 to 15 investment options	6 fund providers each offering 4 to 5 funds	5 to 15 funds	6 funds	5 funds
Default Investment Option	Depending on the Superannuation fund chosen, the default can be either a static or life-cycle approach	Defaulted into fund provider with lowest expense ratio – default life-cycle approach	Default option based on life-cycle approach	Default life-cycle fund	Default life-cycle fund
Low Cost (Approx. Expense Ratios)	0.5% to 0.7%	0.5% to 1%	0.6% to 2.2%	0.3%	0.03%
Investment Period	Mandatory for all employees aged 17 to 70	Participants remain invested until retirement age (65)	Withdrawal when members reach retirement age (65)	Participants remain invested until retirement age (65)	Withdrawal when members reach age 60

Notes:

1. National Employment Savings Trust (NEST) is the Government-backed low cost defined contribution pension scheme.
2. Thrift Savings Plan (TSP) is the defined contribution fund for U.S. federal employees.

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