CPF-Approved Unit Trusts and Investment-Linked Insurance Products

Performance and Risk Monitoring Reports
as of 30 June 2000

Summary Report

Prepared by:

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Important Disclaimers: Past performance is not a reliable indicator of future performance. Past performance is no guarantee of future success. This report should not be used as the sole basis for any investment decisions. William M. Mercer (S) Pte Ltd (Mercer) has prepared this report based on data believed by us to be reliable. However, Mercer makes no warranties of any kind as to the accuracy of the data contained herein. Mercer will not be liable for any reliance for purposes of investment decisions on the data presented in this report.

Summary Report

The Central Provident Fund (CPF) Board has appointed Mercer to develop the Risk Classification System and Performance and Risk Monitoring System to help CPF members make informed investment decisions. The purpose of this report is to provide a summary of the performance and risk monitoring for periods ending 30 June 2000.

Product Summary

The range of choice available to CPF members has continued to increase during the most recent quarter.

- As of 30 June 2000, the CPF Board had approved 92 unit trusts, 50 investment-linked insurance products (ILPs).

- 25 new CPF-approved unit trusts and 4 new ILPs were made available to CPF members during the 2nd quarter of 2000. The names of these additional products are included in Appendix 2 to this report.

- In total, 90 approved unit trusts and 46 ILPs had been made available to CPF members as of the end of June. An additional 2 approved unit trusts and 4 ILPs had yet to be made available to CPF members as of the end of June.

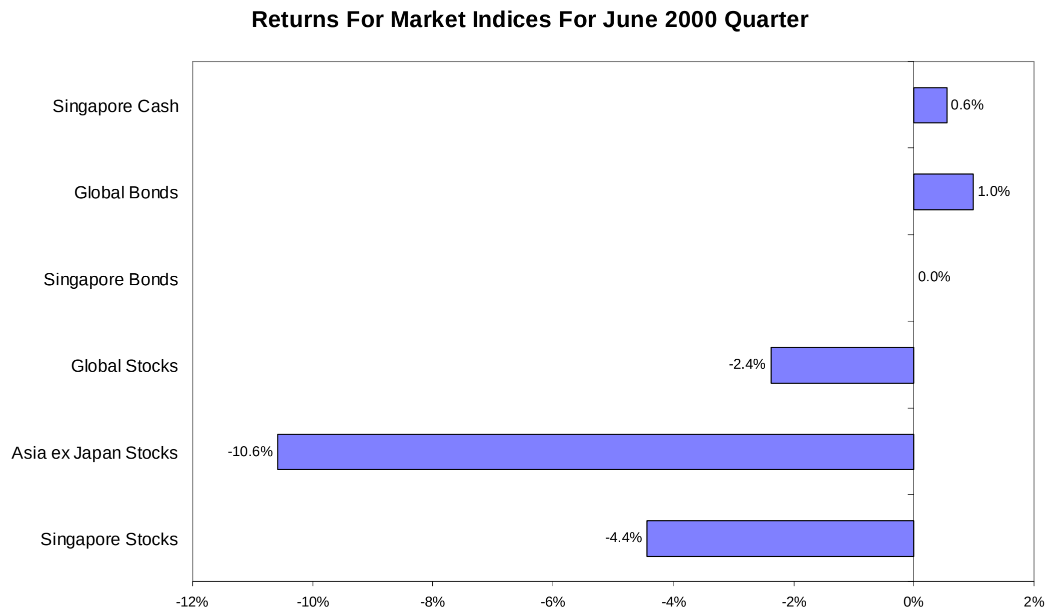
Market Environment

- With the risk that the US economy might suffer a hard landing, coupled with the risk of rising inflationary pressures, stock markets around the world were weak during the second quarter.

- A contributing factor to the negative returns achieved by stock markets was the correction in the technology sector – the NASDAQ Composite Index declined 13.3% in US dollar terms during the June quarter.

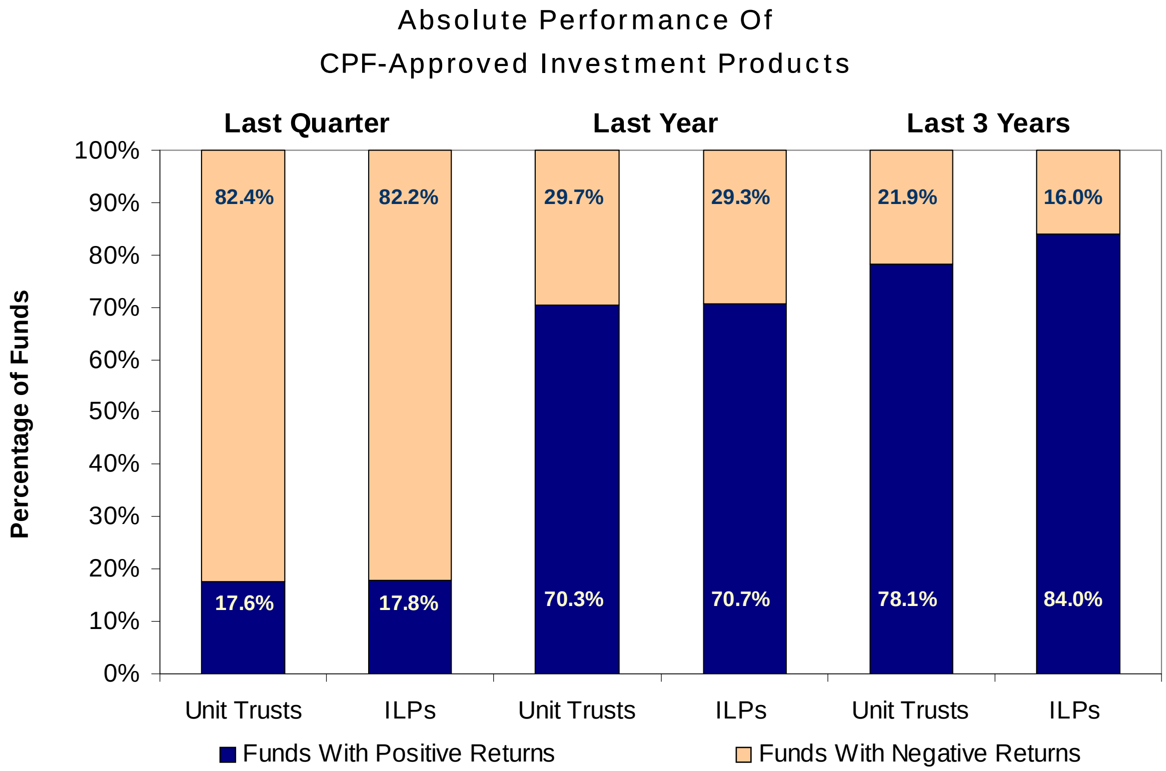
- Global bond markets generally produced slight positive returns for the quarter.

- The chart at the top of the next page shows the returns for various market indices during the June 2000 quarter. All returns are shown in Singapore dollar terms.



Summary of Absolute Performance

- The following chart summarises the performance of CPF-approved unit trusts and ILPs over various periods ended 30 June 2000.

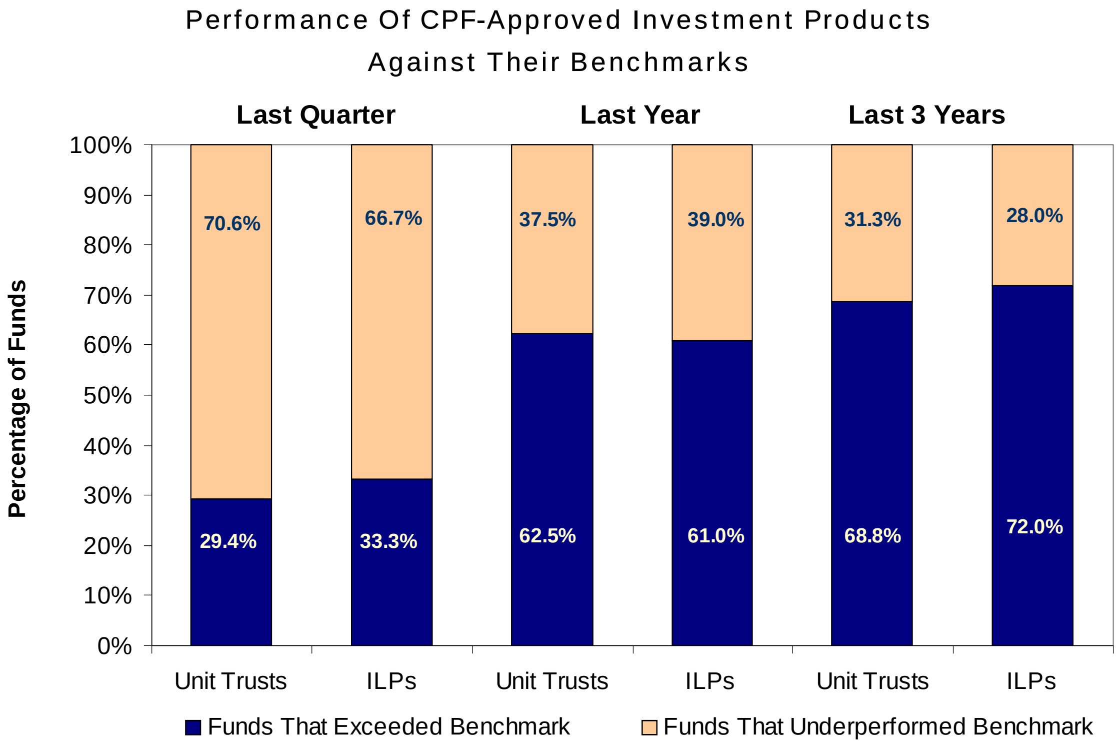


- In line with the negative returns experienced by stock markets, most funds achieved negative returns for the June 2000 quarter. In general, the only funds that managed to achieve positive returns were those investing primarily in bonds or short-term deposits.

- As the above chart illustrates, most products have achieved positive absolute returns over longer time periods. In general, the only products that have not achieved positive returns over the past 3 years have been those with significant exposure to the smaller Asian stock markets. These markets generally suffered most from the impact of the Asian financial crisis and in many cases have yet to fully recover.

Summary of Performance Relative to Benchmarks

- The following chart summarises the performance of CPF-approved unit trusts and ILPs relative to the benchmark selected by their fund manager over various periods ended 30 June 2000.



- Many of the equity unit trusts underperformed during the June quarter due to overweight exposures to the technology sector, which underperformed the broader market during the quarter.

- The above chart illustrates that, while most products underperformed their benchmarks during the June quarter, the majority of products have exceeded their benchmarks over longer time periods.

Performance Rating System

Mercer has developed a Performance Rating System for CPF-approved unit trusts and ILPs, under which ratings are assigned based on analysis of past performance relative to a benchmark considered relevant by Mercer.

- A minimum three-year track record is required for an A, B, C or D rating to be assigned.

- For CPF-approved unit trusts/ILPs with less than a three year track record, a rating of "Non-Rated-plus" (NR+) or "Non-Rated-minus" (NR-) is assigned based on whether the unit trust/ILP has achieved positive or negative excess returns during the period for which a relevant performance track record is available.

- As of the end of the 2nd quarter of 2000, 33 out of 86 CPF-approved unit trusts and 26 out of 46 CPF-approved ILPs met the criteria of a minimum three-year relevant track record. The distribution of Mercer performance ratings was as follows:

CPF-approved Unit Trusts

Rating	No. This Quarter	No. Last Quarter
A	9	9
B	9	7
C	5	5
D	10	5
NR+	28	21
NR-	25	18

CPF-approved ILPs

Rating	No. This Quarter	No. Last Quarter
A	2	2
B	8	10
C	7	7
D	8	6
NR+	8	8
NR-	12	9

- Please refer to Appendix 1 for a fuller description of the Mercer performance rating system for CPF-approved investment products.

For Further Information

- The Summary Tables in the Performance and Risk Monitoring Reports present the Performance Evaluation summary for the 2nd quarter of 2000 and Mercer's rating of all CPF-approved unit trusts/ILPs for which at least a full quarter of relevant performance track record is available. Additional details regarding the investment of these CPF-approved unit trusts/ILPs are available at Mercer's website:

  - for unit trusts at: http://www.wmmercer.com/singapore/cpf/utperf
  - for ILPs at: http://www.wmmercer.com/singapore/cpf/ilpperf

- Additional information can also be found in the appendices to this report. In particular:

  - Appendix 2 contains additional information in regard to developments affecting CPF-approved investment products during the June 2000 quarter;
  - Appendix 3 contains an analysis that Mercer has undertaken on the relative performance of some of the other options that are available to CPF members under the CPF Investment Scheme;
  - Appendix 4 contains additional information on some of the terms referred to in this report and in the various performance tables available in the reports that can be downloaded from Mercer's website; and
  - Appendix 5 contains details of a roadmap that Mercer has prepared to assist CPF members in understanding the Summary Tables and using them as part of a step-by-step process to making investment decisions.

Disclaimers and Notes on Recommended Usage of the Information Presented in This Report

All data contained in this report has ultimately been provided to Mercer by the FMCs/Insurer or the trustees for the CPF-approved unit trusts and ILPs. While Mercer has checked this data for reasonableness, ultimately we cannot take any responsibility for the accuracy of this data.

The information contained in this report is intended to be helpful to CPF members as they consider making investments in CPF-approved unit trusts and ILPs. However, none of the information supplied herein should be considered to be a recommendation either for or against any particular unit trust or ILP. Moreover, none of the information provided herein should be considered to represent investment advice or to constitute an investment recommendation.

CPF members may choose to utilise the information presented herein to help narrow down the group of unit trusts or ILPs in which they may be interested in investing. However, Mercer strongly recommends that a CPF member obtains and thoroughly reads the prospectus or corresponding material for any unit trust or ILP in which they are seriously considering making an investment. Additional information regarding any individual Insurer/FMC and the investment process and investment team associated with the management of one of its CPF-approved unit trusts or ILPs can and in Mercer's opinion should be requested from that Insurer/FMC and reviewed by a CPF member prior to an investment being made. Despite the information provided herein, CPF members remain ultimately responsible for becoming fully informed about their investments and for making their own investment decisions.

In considering the information presented in this report or other information with which they may be provided, CPF members should bear in mind that past performance provides no guarantee of future success. In fact, past performance by itself is generally a very poor predictor of future performance.

Performance Rating System for CPF-approved Unit Trusts and ILPs

As an aid aimed at helping CPF members evaluate the strength of past performance across unit trusts or ILPs with a similar investment mandate, Mercer has developed a performance rating system for CPF-approved unit trusts/ILPs. The methodology for this performance rating system is as follows:

- Ratings are assigned based on analysis of past excess returns relative to a benchmark considered relevant by Mercer.

- Ratings should only be used to evaluate the strength of past performance across unit trusts/ILPs that invest in the same set of markets and in similar types of securities.

- Because ratings are assigned based on analysis of past performance only, they should not be taken to be indicative of a comprehensive evaluation by Mercer of the unit trust's/ILP's prospects for future success. Past performance is not a good predictor of future success. Qualitative factors -- the investment philosophy, the investment process, the team of investment professionals and other resources that support the implementation of the process -- are also important. The ratings do not necessarily reflect Mercer's view of the probability of future outperformance by a given unit trust/ILP relative to its benchmark, because they do not take these qualitative factors into account.

- Ratings of 'A', 'B', or 'C' may be assigned to a unit trust/ILP with strong past performance versus benchmark, with the 'A' rating being given to unit trusts/ILPs with the strongest past performance versus benchmark. A minimum three-year track record deemed relevant by Mercer is necessary for a rating to be assigned. A rating of 'D' is given to unit trusts/ILPs which have a long enough track record to meet the criteria for a rating, but which fall below the criteria established for award of the 'C' rating.

- For unit trusts/ILPs with less than a three-year track record deemed relevant by Mercer, a rating of 'NR+' or 'NR-' is assigned based on whether the unit trust/ILP has achieved positive or negative excess returns relative to benchmark during the period for which a relevant track record is available. (The initials NR stand for 'Not Rated'.)

- In some instances, substantial changes in organisation, process or investment personnel may cause Mercer to conclude that some period of the past performance of a unit trust/ILP should not be considered to be relevant. In such a case, the portion of the historical track record for the fund that is deemed to be irrelevant will not be considered in Mercer's evaluation. This may result in an approved unit trust/ILP with longer than a three-year track record being assigned a different rating than might otherwise be the case, including an NR+ or NR- rating.

- Where more than three years of track record are available, the unit trust's/ILP's longer-term track record will be taken into account in assigning a rating, up to some limit in terms of maximum length of track record deemed relevant by Mercer. Up to this limit, the longer the track record deemed relevant by Mercer which is available for a unit trust/ILP, the easier it will be for that unit trust/ILP to achieve a higher rating, subject to its achievement of consistent outperformance.

- The benchmark applied in evaluating a unit trust's/ILP's performance shall be selected by Mercer based on Mercer's evaluation of the types of investments which Mercer believes are likely to be generally made by the fund manager for the unit trust. This may result in use of a different index benchmark by Mercer for purposes of this analysis for a given unit trust/ILP than that suggested by the fund manager.

- One specific measure of performance to which Mercer refers in determining the ratings will be the **Information Ratio**. (Please refer to the definition in Appendix 4 of this report.)

Developments Relating To CPF-Approved Unit Trusts and ILPs During June 2000 Quarter

New CPF-approved Unit Trusts and ILPs

25 new unit trusts and 4 new ILPs were made available to CPF members during the quarter.

The new unit trusts

- DBS Eight Portfolio A
- DBS Eight Portfolio B
- DBS Eight Portfolio C
- DBS Eight Portfolio D
- DBS Eight Portfolio E
- DBS Horizon Asia ex Japan Equity Fund
- DBS Horizon Continental Europe Fund
- DBS Horizon Global Bond (S$ Hedged) Fund
- DBS Horizon Global Bond (US$ Hedged) Fund
- DBS Horizon Global Equity Fund
- DBS Horizon Japanese Equity Fund
- DBS Horizon Singapore Equity Fund
- DBS Horizon Singapore Fixed Income Fund
- DBS Horizon UK Equity Fund
- DBS Horizon US Equity Fund
- Henderson European Fund
- Schroder Asian Growth Fund
- Franklin Templeton Asian Development Equity Fund
- Franklin Templeton Emerging Markets Fund
- Franklin Templeton Korea Fund
- Franklin Templeton Thailand Fund
- Franklin Templeton Life Sciences Discovery Fund
- SG Asian New Economy Fund
- UOB Unifund
- UOB United Japan Growth Fund

The new ILPs

- AXA Investors Choice – Capital Growth Fund
- AXA Investors Choice – Dynamic Growth Fund
- AXA SGY Europe Preservation Growth Fund
- John Hancock Greater China Fund

Organisational Changes

Following the recruitment of Bernard Lim as an Investment Director in the first quarter, Rothschild Asset Management (RAM) has continued to strengthen its investment team in Singapore with several additional senior investment management appointments. Tan Leng Leng and Nancy Chu recently joined RAM's fixed income team in Singapore. Leng Leng, who was previously with Lehman Brothers in Singapore, was appointed an Investment Director (Global Fixed Interest and Currency). Nancy, who joined RAM as an Assistant Director, was previously with Equitilink Investment Management. On the equity side, Tiong Jin Yan was hired from Capital International, and joined RAM in early July as an Investment Director (Equity). Kenny Tjan joined RAM from Nomura Asset Management as an Assistant Director (Equity) from the middle of July.

Change of Name

From 6 June 2000, Templeton Asset Management changed the names of its unit trusts. This change applied purely to the name of each fund and did not affect their mandates. The old and corresponding new name of each unit trust that was previously available to CPF members is given below:

Old Name	**New Name**
Templeton IF Asian Growth Fund	Franklin Templeton Asian Growth Fund
Templeton IF Global Growth Fund	Franklin Templeton Global Growth Fund
Templeton IF Global Balanced Fund	Franklin Templeton Global Balanced Fund

Analysis Of Returns Of CPF Ordinary Account and Investment in Individual Stocks

CPF members are currently actively investing in individual stocks listed on the Singapore stock exchange. Mercer picked five Straits Times Index (STI) index stocks at random in order to provide an illustrative analysis of the risk and return characteristics of investing in individual stocks as opposed to unit trusts or ILPs. The stocks selected were those of Singapore Airlines (SIA), Singapore Telecommunications Ltd (SingTel), United Overseas Bank (UOB), Creative Technology (Creative) and DBS Land.

Our analysis showed that only 3 of these stocks, namely SIA, UOB and Creative, outperformed the STI during the most recent five years, while SingTel and DBS Land underperformed.

We also analysed the returns a CPF member would have earned if their money were left in the CPF Ordinary Account.

Mercer also "risk classified" and "rated" these stocks and the CPF Ordinary Account based on the same methodology as for our ratings of CPF-approved unit trusts and ILPs. The results are as follows:

	5-year			
Name	**Excess Returns (% p.a.)**	**Tracking Error (% p.a.)**	**Mercer Rating**	**Risk Classification**
Creative	24.4%	73.8%	B	Higher Risk – Narrowly Focused (Singapore-Centred Securities)
DBS Land	-12.3%	28.9%	D	" "
SIA	17.8%	28.9%	A	" "
SingTel	-2.1%	33.8%	D	" "
UOB	5.8%	27.6%	C	" "
CPF Ordinary Account	0.6%	0.4%	A	Lower Risk

In the calculations of the **excess returns** and **tracking error**, Creative, DBS Land, SIA, SingTel and UOB are compared against the Straits Times Index, while the CPF Ordinary Account is compared against the 1-month Singapore Inter-Bank Bid Rate (SIBID).

This analysis lends support to Mercer's view that, all else equal, CPF members are better off investing in CPF-approved unit trusts and ILPs rather than investing in individual stocks. It also lends support to our view that the CPF Ordinary Account is a strong investment option for CPF Members wishing to invest in the Lower Risk category.

Definitions

Risk Classification

Please see the handbook titled "CPF Investment Scheme Risk Classification System: Investing in Unit Trusts" for a full discussion of the CPFIS Risk Classification System. You can obtain a copy of this handbook from any CPF office, CPF-approved FMC or agent bank. You can also download the handbook at the CPF Board's website at:

http://www.cpf.gov.sg/publication/riskclas.asp

The following table provides a summary of the risk classifications of the unit trusts and ILPs available to CPF members as of 30 June 2000:

Risk Classification	Unit Trusts	ILPs
Higher Risk	71	23
Medium to High Risk	7	13
Low to Medium Risk	9	6
Low Risk	3	4

Performance Comparisons

Various measures of the historical investment performance of the CPF-approved unit trusts and ILPs covered in this report are provided herein. Where appropriate, comparisons are made to the performance of benchmark indices. Despite the risk classification of the unit trusts/ILPs and the requirement that Insurer/FMCs adopt a formal index benchmark for their CPF-approved unit trusts/ILPs, CPF members will still need to exercise substantial care in making performance comparisons across unit trusts/ILPs. Mercer hopes that over time there will be a shift by Insurers/FMCs to utilisation of a common benchmark, or at least a less varied group of benchmarks, for unit trusts/ILPs with similar investment mandates.

In the meantime, one question a CPF member might consider in evaluating past performance is whether to focus on absolute performance among unit trusts/ILPs with similar benchmarks, or whether to focus on each unit trust's/ILP's relative performance versus its stated benchmark. Over the long-term, Mercer believes it is generally appropriate to focus on excess returns relative to benchmark rather than absolute performance. This is because the benchmark generally represents the performance of the class of investments the unit trust/ILP invests in and so provides a useful point of reference in evaluating whether the manager has skill.

In Mercer's opinion, short-term results in general should be given little attention in investment-decision making.

Calculations and Methodology

The following outlines the methodology used by Mercer to evaluate the performance and risk of the CPF-approved unit trusts and ILPs covered by our reports.

Mercer measures unit trust/ILP investment performance by comparing net asset value (NAV) at the beginning and end of the measurement period and with dividends reinvested. Quantitative measures of risk, such as the standard deviation of returns, are computed based on the underlying return figures that are calculated by means of this methodology.

This report also includes information on **Expense Ratios**. These expense ratios are calculated by the Insurers/FMCs. While Mercer has attempted to check these figures for reasonableness, Mercer cannot take responsibility for the accuracy of the Insurers'/FMCs' calculations of these figures. Mercer has requested that the Insurers/FMCs include marketing and advertising charges in calculating the expense ratios for their unit trusts/ILPs. The expense ratio is thus defined in principle as the total annual expenses paid out of the assets of a unit trust/ILP divided by its average net assets. Given this definition, expense ratio figures are only available for unit trusts/ILPs that have been in existence for at least one year. Also, expense ratios will depend in part on the level of investment management and other fees associated with each unit trust/ILP as well as its total asset size.

Definitions of Technical Terms

Excess return is the difference between the return of a unit trust/ILP and the return of its index benchmark. If the unit trust/ILP has outperformed its benchmark, the excess return figure will be positive. If the unit trust/ILP has underperformed its benchmark, the excess return will be negative.

The **Risk-Adjusted Return** is calculated as the annualised return divided by the annualised standard deviation (risk). It is a measure of the trade-off between return and risk. The higher the result the greater the level of return per unit of risk taken.

The **Information Ratio** is a measure of the value that has been added by the manager per unit of risk taken relative to the benchmark. All else equal, the higher the information ratio, the better.

The information ratio might reasonably be considered to represent a measure of the past skill demonstrated by (or luck experienced by) the FMC/Insurer. If the information ratio is large and is measured over a reasonably long period of time, then this may be an indication that the FMC/Insurer has demonstrated some past skill in managing investments.

Tracking error is a measure of a portfolio's risk or volatility compared to its benchmark. It is a relative measure and does not attempt to measure absolute return or absolute risk. In essence, it measures the risk of significant departures from the benchmark. For the purposes of our reports, it is calculated as the standard deviation of monthly relative performance figures.

Roadmap For Investing in CPF-Approved Unit Trusts and ILPs

In order to assist CPF members in understanding the Summary Table and using it as part of a step-by-step process to making investment decisions, Mercer has developed the Roadmap for Investment in CPF-approved Unit Trusts/ILPs. The Roadmap provides a framework to address questions that are likely to surface when making investment decisions. To fully utilise the Roadmap, investors are required to answer questions including the following. These are personal questions and should in Mercer's view be answered by investors based on their own personal circumstances before making long term investment decisions.

- Do I want to invest?
- Do I want to purchase insurance coverage together with my investment?
- How much do I want to invest?
- How long will the money be invested?
- How well diversified do I want to be?
- What unit trust(s)/ILPs do I want to invest in?

The Ratings and Roadmap are provided to assist CPF members in choosing unit trusts/ILPs that have outperformed their respective benchmarks in the past.

Roadmap for Investing in CPF-approved Unit Trusts/ILPs

Determine whether to invest in unit trusts or ILPs

→ Deciding whether you wish to purchase insurance coverage together with your investment

Look at relevant Table

Decide which Risk Class to invest in by looking at

→ *1.Risk Tolerance*

- Amount of risk you will be comfortable with and can afford to take.

→ 2.*Investment Time Horizon*

- How long will your money be invested?
- Usually the longer the investment time horizon, the more risk you can afford to take.

→ 3.*Overall Financial Situation*

- How much will be needed to sustain your lifestyle during retirement?
- How are your other assets invested?
- What are your other financial commitments?
- Usually, the lower your other financial commitments and the higher the provision you have made for your retirement, the more risk you can afford to take.

Decide on Risk Class, i.e., Higher, Medium to High, Low to Medium or Lower Risk

→

- Also, need to decide between Narrowly Focused and Broadly Diversified. All else equal, it is better to diversify.
- Asset class(es) chosen will determine the benchmark return.
- Bear in mind, an asset class currently doing well may not necessarily do well in the future.
- Base your decision on which asset classes you think will perform well in the future.

Look at Rating of Unit Trusts/ILPs within your chosen Risk Class

All else equal, the higher the Rating the better the risk-adjusted past performance of the Unit Trust/ILP

If two or more Unit Trusts/ILPs have the same Rating?

Look at the Information Ratio

→ The higher the Information Ratio, the more the manager has outperformed the benchmark relative to the risk the manager has taken versus the benchmark.

Invest in the chosen Unit Trust(s)/ILP(s)

→ Note: Picking the appropriate Risk Class(es) in which to invest will generally be more important as a determinant of investment results than picking the right unit trust(s)/ILP(s) within a given Risk Class.