Unit Trusts and Investment-Linked Insurance Products Included Under CPFIS

Performance and Risk Monitoring Reports as of 31 December 2000

Executive Summary (For Public Dissemination)

Prepared by:



January 2001

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.

Executive Summary

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 31 December 2000.

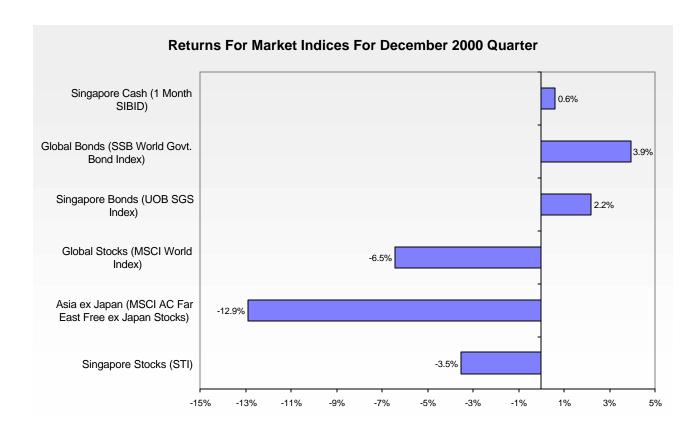
Product Summary

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

- As of 31 December 2000, there were 107 unit trusts and 68 investment-linked insurance products (ILPs) included under the CPF Investment Scheme (CPFIS).
- 11 new unit trusts and 12 new ILPs were made available to CPF members during the 4th quarter of 2000. The names of these additional products are included in Appendix 2 to this report.
- In total, 106 unit trusts and 68 ILPs had been made available to CPF members as of the end of December. An additional 1 unit trust had yet to be made available to CPF members as of the end of December.

Market Environment

- Most global equity markets performed very poorly in the 4th quarter, bringing to an end one of the worst years for stocks in almost 10 years. In the US, the late-year presidential election deadlock dominated the news and affected an already nervous market. Among the big losers for the major markets in the 4th quarter were Japan, Taiwan, Korea, and the technology sector in the US.
- Global bond markets ended the 4th quarter and finished the year very strongly. Against the backdrop of second half stock market turmoil, a decelerating US economy, and expectations of short supply, both European and US government bonds rallied strongly in 2000. Clearly the best year for bonds since about 5 years ago, the returns from US government debt easily outperformed those of the domestic stock market.
- The chart at the top of the next page shows the returns for various market indices during the December 2000 quarter. All returns are shown in Singapore dollar terms on an unhedged basis.

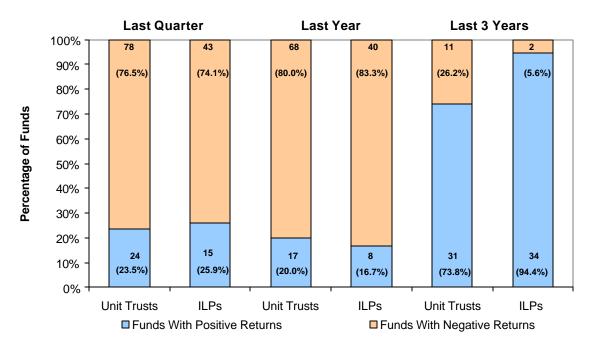


• It is worth noting that, although the STI fell 3.5% for the December quarter, the DBS50 (another measurement of the Singapore stock market) actually rose 2.1%.

Summary of Absolute Performance

• The following chart summarises the performance of unit trusts and ILPs included under CPFIS over various periods ended 31 December 2000.

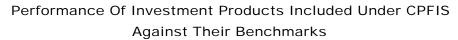
Absolute Performance Of Investment Products Included Under CPFIS

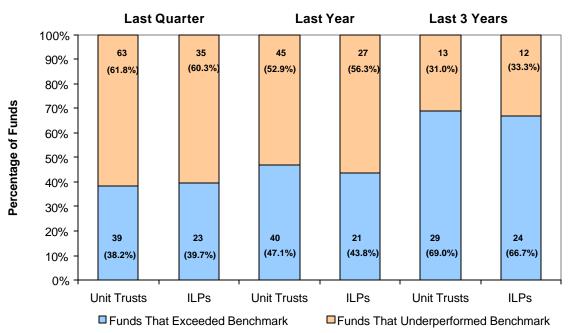


- In line with the negative returns experienced by stock markets, most funds achieved negative returns for the December 2000 quarter. In general, the only funds that managed to achieve positive returns were those investing primarily in short-term deposits and global bond funds.
- As the above chart illustrates, most products have achieved positive absolute returns over three year 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 unit trusts and ILPs included under CPFIS relative to the benchmark selected by their fund manager over various periods ended 31 December 2000.





- On average, less than half the investment products outperformed their various benchmarks during the December quarter. Many of the equity funds that underperformed had sizeable exposures to growth-oriented companies in line with the managers' investment styles. In general, growth stocks significantly underperformed the broader market indices during the December quarter and for the year 2000 as a whole.
- The above chart illustrates that, while many products underperformed their benchmarks during the December quarter, the majority of products have exceeded their benchmarks over three year periods.

Performance Rating System

Mercer has developed a Performance Rating System for unit trusts and ILPs included under CPFIS, 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. Where Mercer deems it appropriate, this could include the track record for a feeder fund.
- For unit trusts/ILPs with less than a relevant 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. NA denotes funds that have less than a full three months of performance track record or where performance data was not supplied and hence the funds were not rated.
- As of the end of the 4th quarter of 2000, 54 out of 106 unit trusts and 37 out of 68 ILPs met the criteria of a minimum three-year relevant track record.

Unit Trusts Included Under CPFIS

	N. m o	N. T. (0)
Rating	No. This Quarter	No. Last Quarter
A	14	13
В	13	11
C	10	9
D	17	16
NR+	21	25
NR-	28	21
NA	3	_

ILPs Included Under CPFIS

Rating	No. This Quarter	No. Last Quarter
A	5	6
В	8	8
C	12	11
D	12	12
NR+	10	9
NR-	11	6
NA	10	4

• Please refer to Appendix 1 for a fuller description of the Mercer performance rating system for investment products included under CPFIS.

For Further Information

• The Summary Tables in the Performance and Risk Monitoring Reports present the Performance Evaluation summary for the 4th quarter of 2000 and Mercer's rating of all unit trusts/ILPs included under CPFIS for which at least a full quarter of relevant performance track record is available. Additional details regarding the investment of these unit trusts/ILPs are available at the following website

http://www.MercerFundWatch.com/CPF.

- Additional information can also be found in the appendices to this report. In particular:
 - Appendix 2 contains additional information in regard to developments affecting the investment products included under CPFIS during the December 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 Fund Management Companies (FMCs)/Insurers for the unit trusts and ILPs included under CPFIS. 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 unit trusts and ILPs included under CPFIS. 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 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 Unit Trusts and ILPs Included Under CPFIS

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 unit trusts/ILPs included under CPFIS. 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 a 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 Unit Trusts and ILPs Included Under CPFIS During December 2000 Quarter

New Unit Trusts and ILPs Included Under CPFIS

11 new unit trusts and 12 new ILPs were made available to CPF members during the quarter.

The new unit trusts

- OCBC Infinity Global Stock Index Fund
- OCBC Infinity European Stock Index Fund
- OCBC Infinity US 500 Stock Index Fund
- OCBC Capital Guaranteed Fund
- Schroder Global Technology Fund
- UOB Millennium Trust I
- UOB Millennium Trust II
- UOB Millennium Trust III
- UOB Global Healthcare Fund
- UOB Capital Guaranteed Fund
- Franklin Templeton US Aggressive Growth Fund

The new ILPs

- AIA Global Balanced Fund
- AIA Global Technology Fund
- AIA International Healthcare Fund
- OAC Capital Protected Investor Global
- OAC Capital Protected Investor Europe
- John Hancock Japan Growth Fund
- PruLink Global Life Sciences Guaranteed Fund
- PruLink Global Top 50 Guaranteed Fund
- PruLink Technology Guaranteed Fund
- GE Greatlink Global Balanced Fund
- GE Greatlink Global Technology Fund
- AXA-SGY Europe Preservation Growth Plus Plan

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 CapitaLand ¹.

Our analysis showed that 3 of these stocks, namely SIA, UOB and Creative, outperformed the STI during the most recent five years, while SingTel and CapitaLand 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 unit trusts and ILPs included under CPFIS. The results are as follows:

5-year				
Name	Excess Returns (% p.a.)	Tracking Error (% p.a.)	Mercer Rating	Risk Classification
Creative	9.4%	72.3%	С	Higher Risk – Narrowly Focused (Singapore-Centred Securities)
CapitaLand	-5.8%	29.8%	D	
SIA	17.6%	28.9%	A	66 66
SingTel	-0.2%	34.7%	D	44 44
UOB	11.2%	27.9%	В	· · · ·
CPF Ordinary Account	0.5%	0.4%	A	Lower Risk

In the calculations of the **excess returns** and **tracking error**, Creative, CapitaLand, 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 unit trusts and ILPs included under CPFIS 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.

¹ With the merger of DBS Land and Keppel Land, we have continued DBS Land track record with CapitaLand's from December 2000.

Definitions

Risk Classification

Please see the handbook titled "CPF Investment Scheme Risk Classification System: Investing in Unit Trusts" for a full discussion of CPFIS Risk Classification System. You can obtain a copy of this handbook from any CPF office, FMC included under CPFIS 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 31 December 2000:

Risk Classification	Unit Trusts	ILPs
Higher Risk	83	36
Medium to High Risk	9	15
Low to Medium Risk	11	13
Low Risk	3	4

Performance Comparisons

Various measures of the historical investment performance of the unit trusts and ILPs included under CPFIS 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 unit trusts/ILPs included under CPFIS, 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 unit trusts and ILPs included under CPFIS 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. Mercer has requested that the Insurers/FMCs calculate the expense ratio based on IMAS guidelines. For further information, please refer to http://www.imas.org.sg. 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. 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 Ratio** 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 Unit Trusts and ILPs Included Under CPFIS

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 Unit Trusts/ILPs included under CPFIS. 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 Unit Trusts/ILPs Included Under CPFIS

