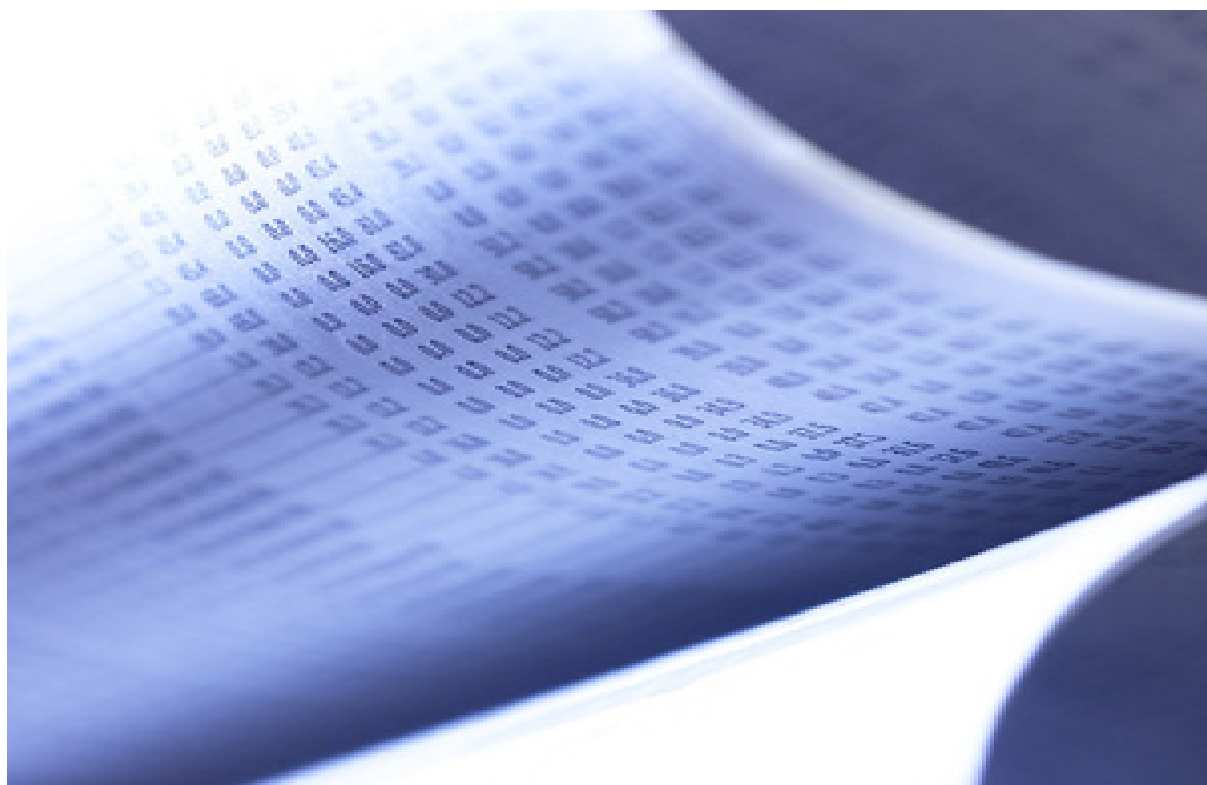


# THIRD QUARTER 2015 PERFORMANCE & RISK- MONITORING REPORT

For CPFIS-Included Unit Trusts & Investment-Linked  
Insurance Products



September 2015

**Thomson Reuters Lipper**

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## 1 INTRODUCTION

Thomson Reuters Lipper has been appointed by Investment Management Association of Singapore (IMAS) and Life Insurance Association of Singapore (LIAS) to monitor the performance of all unit trusts and investment-linked insurance products included under the Central Provident Fund Investment Scheme (CPFIS). This report shows Lipper's findings for the three months ended September 30, 2015.

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### **Important Disclaimers:**

The data shown in this report is information for investors and is not a solicitation to buy, sell, or hold any fund. Past performance is not an indicator of future performance. Past performance is no guarantee of future return. This report should not be used as the sole basis for any investment decision. Before investing in any fund, investors should carefully read the prospectus or other necessary information about the fund. Lipper has used reasonable efforts in preparing this report based on data collected from the contributing asset management companies. However, Lipper doesn't guarantee the accuracy of the data contained herein and will not bear any responsibility for investment decisions of investors or for any loss arising from using the data presented in this report.

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## 2 UPDATE ON CPFIS-INCLUDED FUNDS

As of September 30, 2015, there were 105 unit trusts and 177 investment-linked insurance products (ILPs) included under the CPFIS<sup>1</sup>, for a total of 282 funds.

**Table 1 Number of CPFIS-Included Funds**

	As of End Q3-2015	As of End Q2-2015
Unit Trust	105	107
ILP	177	180
Total	282	287

Source: Central Provident Fund Board

**Table 2 Newly Listed Products**

	Risk Classification	CPFIS Focus	Detail	Lipper Classification
<b>UT</b>				
PineBridge Asia Ex Japan Small Cap Equity Fund	HIGHER RISK	NARROWLY FOCUSED	Asia	Equity Asia Pacific Sm&Mid Cap

Source: Central Provident Fund Board

**Table 3 Delisted Products**

	Risk Classification	CPFIS Focus	Detail	Lipper Classification
<b>UT</b>				
Eastspring Investments U.T. - Global Balanced Fund	MEDIUM TO HIGH RISK	BROADLY DIVERSIFIED	N/A	Mixed Asset SGD Balanced
Eastspring Investments Unit Trusts-Protected Global Titans Fund	LOW TO MEDIUM RISK	BROADLY DIVERSIFIED	N/A	Protected
Eastspring Investments Unit Trusts - Global Leaders Fund	LOW TO MEDIUM RISK	BROADLY DIVERSIFIED	N/A	Equity Global
<b>ILP</b>				
PruLink Adapt 2015	LOW TO MEDIUM RISK	BROADLY DIVERSIFIED	N/A	Target Maturity Other
PruLink Protected Global Titans Fund	HIGHER RISK	BROADLY DIVERSIFIED	N/A	Protected
PruLink Global Leaders Fund	HIGHER RISK	BROADLY DIVERSIFIED	N/A	Equity Global

Source: Central Provident Fund Board

<sup>1</sup> Find more information about unit trusts and investment-linked insurance products (ILPs) included under the CPF Investment Scheme at [http://mycpf.cpf.gov.sg/Members/Gen-Info/Sch-Svc/Asset\\_Enhancement.htm](http://mycpf.cpf.gov.sg/Members/Gen-Info/Sch-Svc/Asset_Enhancement.htm)

### 3 MARKET DEVELOPMENTS IN Q3 2015<sup>2</sup>

#### 3.1 Equity Markets

Global equity markets suffered a big correction and posted negative return in Q3 2015. The MSCI World Index plunged 8.33% (in U.S.dollar terms) for Q3 2015, while it soared 0.49% for Q2 2015. For U.S market, the Dow Jones Industrial Index, NASDAQ and S&P 500 slid 7.58%, 7.35% and 6.94%, respectively, for the period. Most European equity markets also delivered negative performance for Q3 2015. Xetra DAX, CAC 40 and FTSE 100 Index plunged 11.74%, 6.99% and 7.04%, respectively (all in local currencies). All Asia markets retreated and China plunged 28.63% for Q3 2015.

**Table 4 Major Stock Market Indices (all return figures are in the respective local currencies)**

Name	Price	Period ended 30-September-2015				
	2015/9/30	3 Months	6 Months	9 Months	1 Year	3 Years
Swiss Market Index CR	8,513.41	-3.05	-6.74	-5.23	-3.64	31.06
FTSE Bursa Malaysia KLCI CR	1,621.04	-5.02	-11.46	-7.96	-12.20	-0.95
KOSPI Composite CR	1,962.81	-5.37	-3.83	2.47	-2.84	-1.67
S&P BSE SENSEX	26,154.83	-5.85	-6.45	-4.89	-1.79	39.40
S&P 500 Composite CR	1,920.03	-6.94	-7.15	-6.75	-2.65	33.27
CAC 40 CR	4,455.29	-6.99	-11.49	4.27	0.88	32.80
FTSE 100 CR	6,061.61	-7.04	-10.50	-7.68	-8.47	5.56
NASDAQ Composite CR	4,620.17	-7.35	-5.73	-2.45	2.82	48.26
Dow Jones Industrial Average CR	16,284.70	-7.58	-8.39	-8.63	-4.45	21.19
S&P/ASX 200 CR	5,021.63	-8.01	-14.76	-7.20	-5.12	14.47
Philippine PSE Composite CR	6,893.98	-8.86	-13.18	-4.66	-5.34	28.95
Thailand SET CR	1,349.00	-10.34	-10.42	-9.93	-14.93	3.87
Xetra DAX TR	9,660.44	-11.74	-19.27	-1.48	1.96	33.87
TAIEX CR	8,181.24	-12.25	-14.66	-12.10	-8.76	6.04
Jakarta SE Composite Index	4,223.91	-13.98	-23.46	-19.19	-17.78	-0.91
Nikkei 225 CR	17,388.15	-14.07	-9.47	-0.36	7.51	96.03
BOVESPA (Ibovespa) TR	45,059.34	-15.11	-11.91	-9.89	-16.74	-23.86
Singapore Straits Times CR	2,790.89	-15.87	-19.03	-17.06	-14.83	-8.80
RTS CR	789.73	-15.98	-10.30	-0.12	-29.72	-46.48
Hang Seng CR	20,846.30	-20.59	-16.28	-11.69	-9.10	0.03
Shanghai Composite CR	3,052.78	-28.63	-18.55	-5.62	29.14	46.33

Source: Thomson Reuters Lipper

<sup>2</sup> Since the Singapore fund universe is not domestically focused and invests in a host of regions, currencies, and asset classes, discussion of global macroeconomic trends is imperative to understand fund performance. Furthermore, to avoid confusion from counter-directional currency movements (against the Singapore dollar) in the discussion of market trends, all index/average performance figures in this section are expressed in local-currency or U.S.-dollar terms.

### 3.2 Bond Markets

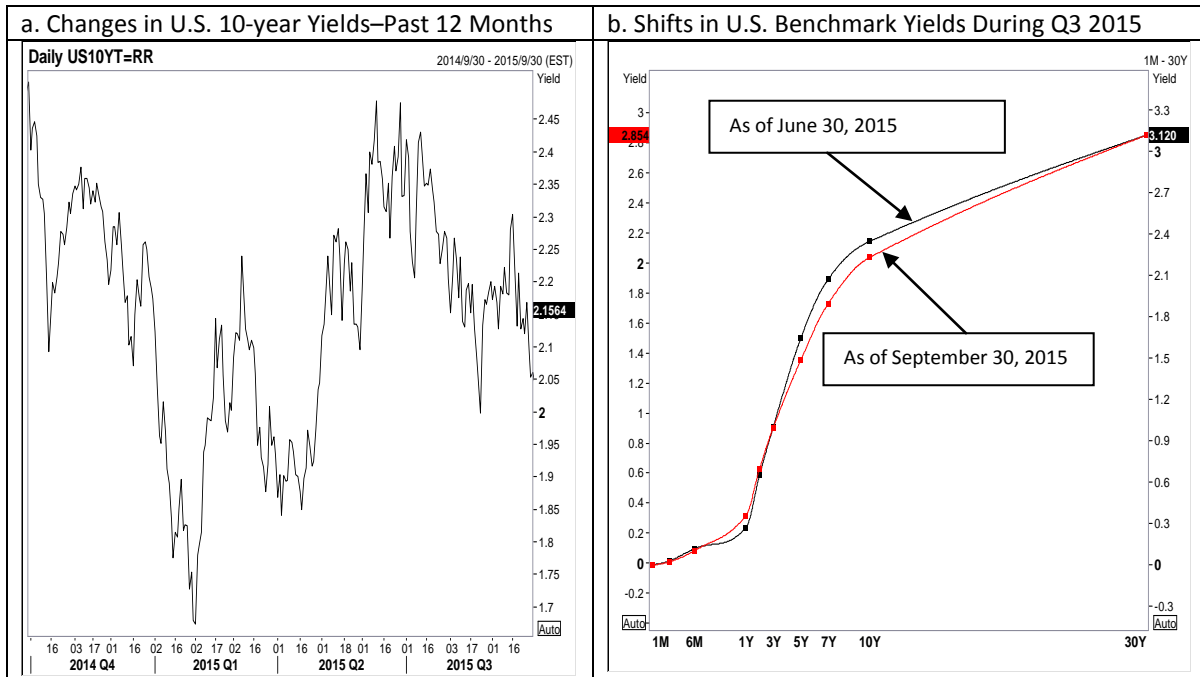
The Citigroup WGBI soared 1.71% for the quarter (in USD). The ten-year Treasury ended at 2.06% for the third quarter versus 2.333% on the end of Q2 2015

### 3.3 The Outlook

All global markets corrected and plunged dramatically because of China worries and the uncertainty of U.S. Fed interest raise. In September, following concerns about Chinese economy and global economic and financial developments, the U.S. Federal Reserve decided against raising U.S. interest rates and leave it at zero to 0.25 percent. Global investors slightly relieved for the time being and global markets started to regain momentum. However, U.S. Fed continued to hint of a possible rate hike in Q4. The European Central Bank and the Bank of Japan recently suggested it could further loosen its monetary policy, while China central bank continued cutting rates. The divergent monetary policies of U.S., China, Japan and the eurozone, are the key influencing factors for global markets.

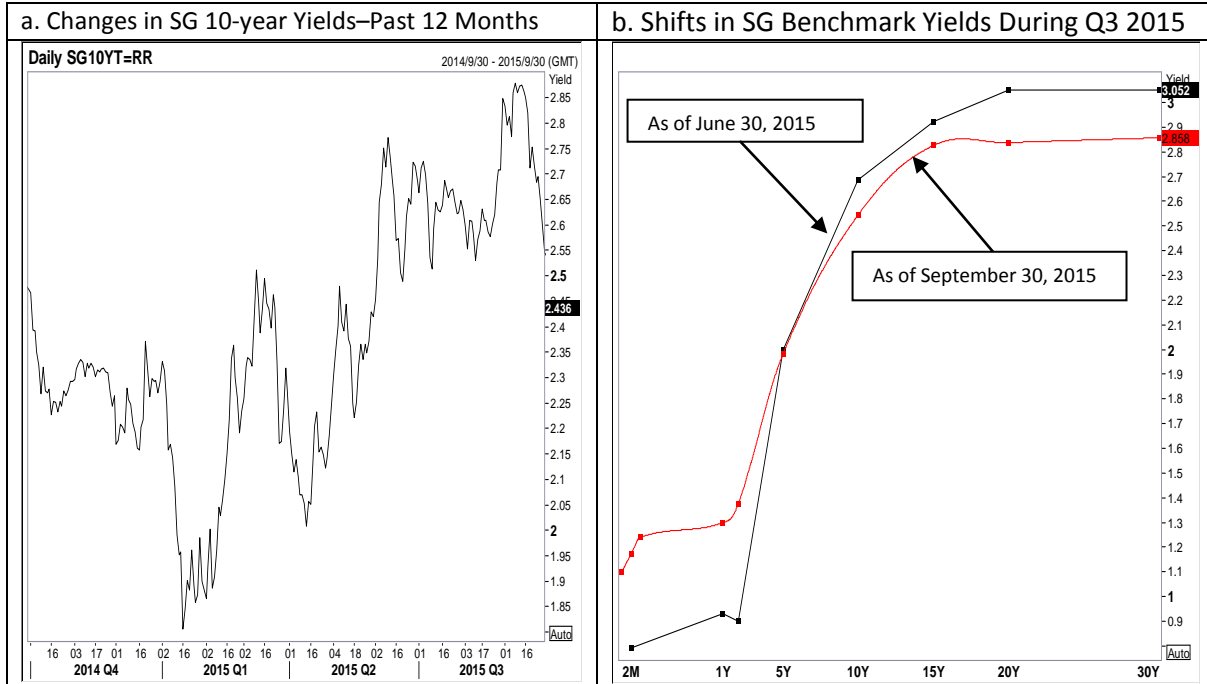


Figure 1 U.S. Government Bond Market Movements



Source: Thomson Reuters

Figure 2 Singapore Government Bond Market Movements



Source: Thomson Reuters

## 4 PERFORMANCE OF WORLDWIDE INDICES IN SGD

Table 5 Worldwide Indices' Performance in SGD

Name	Period ended 30-September-2015				
	3 Months	6 Months	9 Months	1 Year	3 Years
Citi WGBI TR USD	7.41	3.80	4.75	7.22	6.27
UOB Singapore Government Securities All 1+ Years	1.27	-0.63	-0.54	1.92	0.39
SIBOR SGD 3 Months	0.23	0.45	0.61	0.72	1.50
MSCI World TR USD	-3.20	-4.52	1.26	6.40	50.85
STOXX Europe 50 CR EUR	-4.14	-6.64	-1.92	-4.39	18.88
MSCI AC Asia ex Japan TR USD	-12.29	-13.34	-5.89	-2.05	16.71
MSCI EM (Emerging Markets) TR USD	-13.18	-14.08	-9.03	-9.67	-0.41
Singapore Straits Times CR	-15.87	-19.03	-17.06	-14.83	-8.80

Source: Thomson Reuters Lipper

The above indices represent the benchmarks for various major financial markets, as follows:

### Indices

Citigroup WGBI TR  
 MSCI AC Asia ex Japan TR  
 MSCI EM (Emerging Markets) TR  
 MSCI World TR  
 SIBOR SGD 3 Months  
 Singapore Straits Times CR  
 Stoxx Europe 50 CR  
 UOB Singapore Government Securities All 1+ Years

### Financial Markets

Global bond markets  
 Asian ex-Japan equities  
 Emerging markets equities  
 Global equities  
 Singapore money markets  
 Singapore equities  
 European equities  
 Singapore bond markets

The minimum annual interest rate paid by the CPF board for the various accounts is as follows:

- Ordinary: 2.5%
- Special: 4.0%
- Medisave: 4.0%
- Retirement: 4.0%

For more information about CPF interest rates please visit:

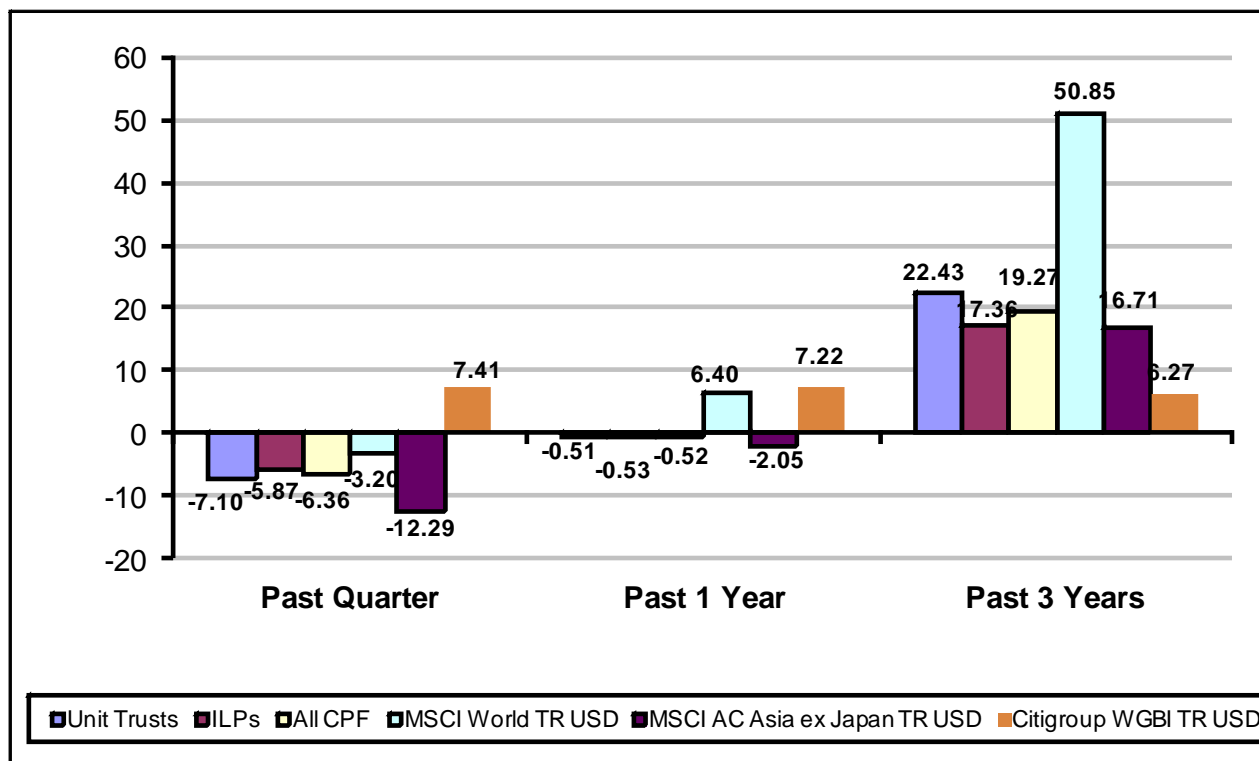
<http://mycpf.cpf.gov.sg/Members/Gen-Info/Int-Rates/Int-Rates.htm>



## 5 SUMMARY OF PERFORMANCE OF CPFIS-INCLUDED FUNDS

The average returns<sup>3</sup> of CPFIS-included unit trusts and ILPs are shown below:

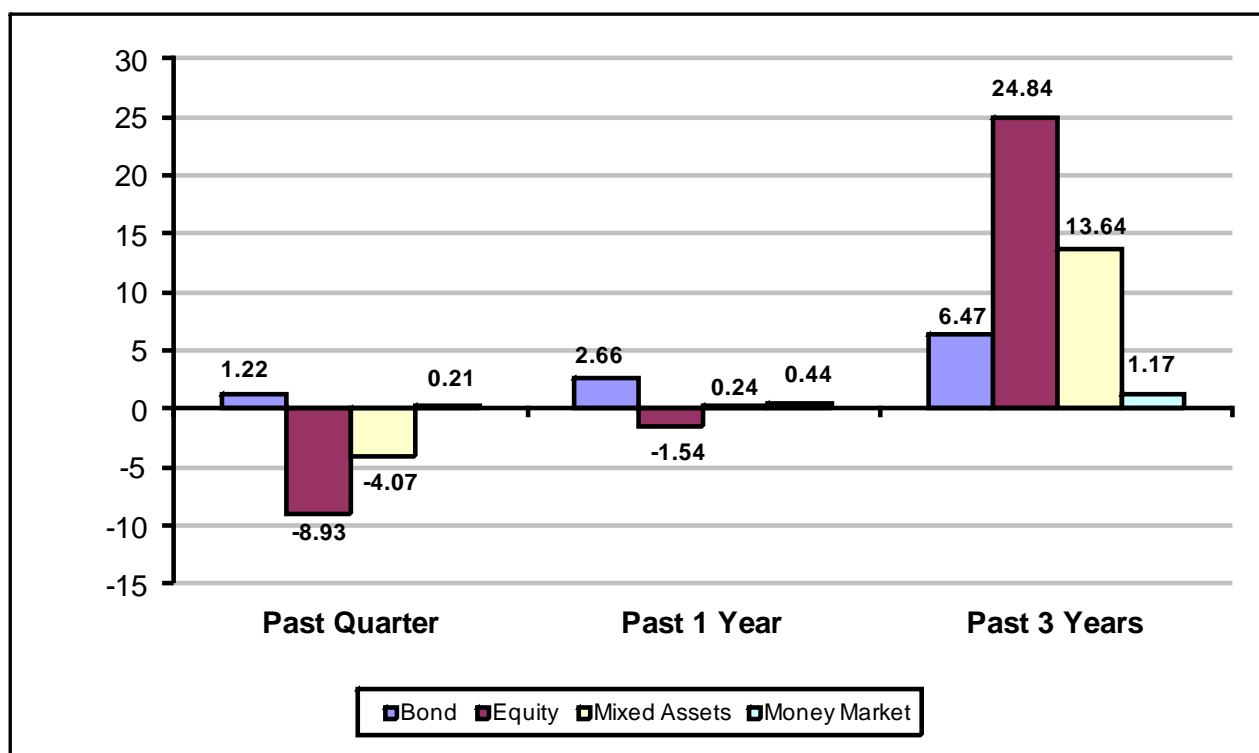
Figure 3 Average Performance of CPFIS-Included Funds at End Q3 2015 (% in SGD)



Source: Thomson Reuters Lipper

<sup>3</sup> Average performance is calculated by a summation of all returns of funds in the group, divided by the number of funds.

Figure 4 Average Performance of CPFIS-Included Funds at End Q3 2015 by Asset Class (% in SGD)



Source: Thomson Reuters Lipper

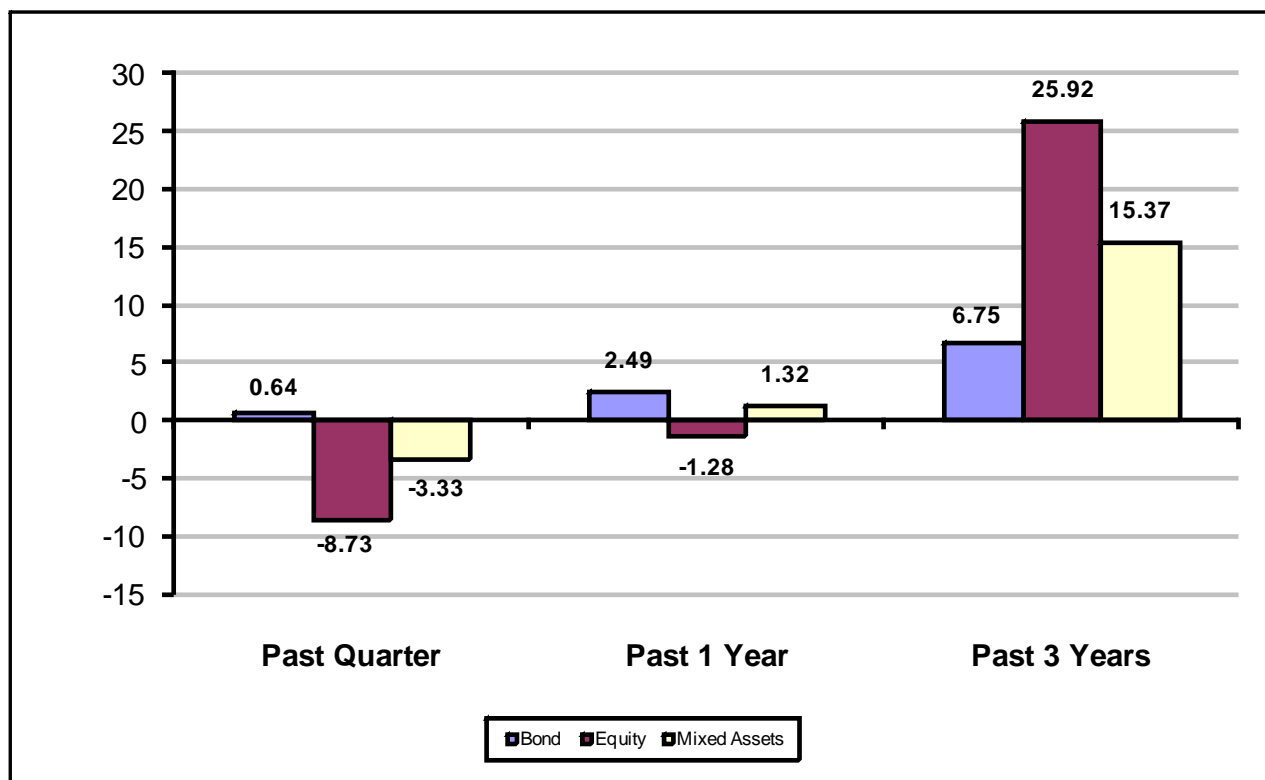
For the third quarter of 2015, the overall performance of CPFIS-included (unit trusts and ILPs combined) funds posted negative returns of 6.36% on average, given a negative return of 7.10% on average among CPFIS-included unit trusts and a negative return of 5.87% among CPFIS-included ILPs. For all the CPFIS-included, Bond and money market funds posted a positive return of 1.22% and 0.21%, while equity and mixed-asset posted a negative return of 8.93% and 4.07%, respectively for the quarter. The MSCI World TR USD slid 3.20% and the MSCI AC Asia ex Japan Index plunged 12.29% for Q3 2015, while the Citigroup WGBI soared 7.41% for the quarter.

For the 12-month period the overall performance of CPFIS-included funds posted a negative return of 0.52% on average. CPFIS-included unit trusts fell 0.51% on the year, and CPFIS-included ILPs fell 0.53% on average. During the same period the key benchmark MSCI World TR USD rallied 6.40% and MSCI AC Asia ex Japan Index slid 2.05%, respectively, while the Citigroup WGBI TR rallied 7.22%. For the one-year period bond products (+2.66% on average) outperformed the equity (-1.54% on average), mixed-asset (+0.24% on average) and money market (+0.44%) type offering.

For the three-year period CPFIS-included funds soared 19.27% growth on average, accounted for by a gain of 22.43% on average from CPFIS-included unit trusts and 17.36% on average from CPFIS-included ILPs. During the same period MSCI World TR USD rallied 50.85%, while MSCI AC Asia ex Japan Index soared 16.71%, while the Citigroup WGBI TR rose 6.27%. Equity type was the leading gainers (+24.84%), while money market portfolio posted 1.17% on average for the period.

The average returns of CPFIS-included unit trusts by asset class<sup>4</sup> are shown below:

**Figure 5 Average Performance of CPFIS-Included Unit Trusts at End Q3-2015 by Asset Class (% in SGD)**



Source: Thomson Reuters Lipper

During third quarter 2015, bond funds of UT portfolios posted positive return of 0.64%, while equity and mixed-asset funds delivered negative returns of 8.73% and 3.33%, on average, respectively.

On average for the one-year period, besides equity funds posted a negative return of 1.28%, bond and mixed-asset funds posted positive returns of 2.49% and 1.32%, on average, respectively.

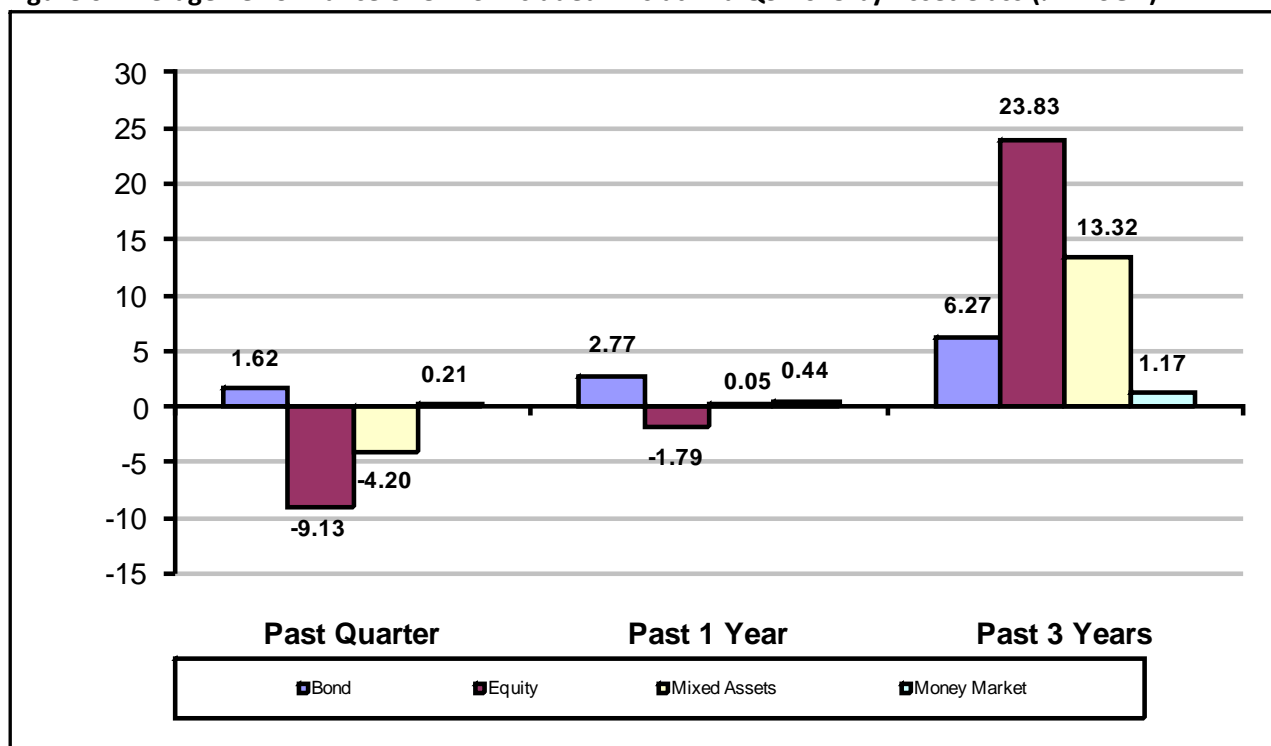
Equity products (+25.92%) outperformed the other asset class offerings over the three-year period, and mixed-asset and bond types posted gains of 15.37% and 6.75% on average, respectively, for the three years through September 2015.

<sup>4</sup> Definition of asset types is as follows:

- Equity: Funds with the primary investment objective of investing in stock markets
- Bond: Funds with the primary investment objective of investing in fixed income markets with an average maturity > 1 year
- Mixed-asset: Funds with the primary investment objective of investing in a strategic mix of equities and fixed income securities
- Money market: Funds with the primary investment objective of investing in fixed income markets with an average residual life to maturity < 12 months

The average returns of CPFIS-included investment-linked insurance products by asset class are shown below:

**Figure 6 Average Performance of CPFIS-Included ILPs at End Q3-2015 by Asset Class (% in SGD)**



Source: Thomson Reuters Lipper

For third quarter 2015 ILP portfolios, bond and money market portfolios posted positive returns of 1.62% and 0.21%, on average, respectively, while Equity and mixed-asset posted negative returns of 9.13% and 4.20%, on average, respectively. For the one-year period bond products (+2.77% on average) outperformed the equity offerings (-1.79% on average), mixed-asset type (+0.05% on average) and money market (+0.44% on average). For the three-year period equity funds were the leading gainers (+23.83%). bond, mixed-asset and money market portfolios delivered 6.27%, 13.32% and 1.17% growth, on average, respectively.

The average returns of CPFIS-included unit trusts by Lipper Global Classification<sup>5</sup> are shown below:

**Table 6 Average Performance of CPFIS-Included Unit Trusts by Lipper Global Classification (% Growth in SGD)**

Name	% Growth	% Growth	% Growth	% Growth	% Growth
	3M 30/06/2015	6M 31/03/2014	9M 31/12/2014	1Y 30/09/2014	3Y 30/09/2012
	To 30/09/2015	To 30/09/2015	To 30/09/2015	To 30/09/2015	30/09/2015
Bond Global (4)	0.73	0.22	1.55	2.59	7.92
Bond SGD (8)	0.77	0.27	1.45	2.60	6.33
Equity ASEAN (1)	-16.45	-22.45	-19.52	-30.32	-13.14
Equity Asia Pacific (1)	-7.59	-11.79	-4.27	-2.31	13.97
Equity Asia Pacific ex Japan (9)	-11.26	-13.96	-8.23	-5.74	12.76
Equity Asia Pacific Sm&Mid Cap (4)	-10.57	-8.19	-2.45	-2.90	36.96
Equity China (4)	-18.19	-11.12	-3.17	7.14	32.48
Equity Emerging Mkts Asia (1)	-8.23	-6.83	0.92	8.44	29.70
Equity Emerging Mkts Global (4)	-10.86	-14.51	-11.40	-12.90	-5.05
Equity Europe (11)	-3.92	-3.86	4.54	5.89	47.16
Equity Global (13)	-6.51	-8.44	-4.73	-1.78	27.35
Equity Global Income (3)	-6.29	-5.67	-3.06	-2.99	29.46
Equity Greater China (6)	-15.17	-12.58	-5.55	-0.04	17.31
Equity Hong Kong (1)	-14.91	-8.86	-0.64	7.15	30.54
Equity India (3)	1.06	-3.51	6.84	17.82	50.39
Equity Indonesia (1)	-18.57	-26.39	-28.32	-31.58	-30.44
Equity Japan (2)	-7.18	-5.65	5.81	7.01	50.29
Equity Korea (1)	-10.70	-5.06	0.50	-8.80	1.18
Equity Malaysia (1)	-13.86	-19.24	-16.95	-24.47	-9.27
Equity Malaysia/Singapore (1)	-14.25	-19.11	-18.15	-20.74	-10.43
Equity Sector Biotechnology (1)	-15.01	-13.07	2.74	18.76	133.26
Equity Sector Gold&Prec Metals (1)	-11.92	-10.47	-11.20	-20.54	-61.90
Equity Sector Information Tech (2)	-0.86	-2.53	1.00	9.30	46.92
Equity Sector Real Est Global (2)	5.03	-4.83	1.85	15.02	32.90
Equity Singapore (6)	-14.71	-16.75	-14.69	-14.21	-2.41
Equity Thailand (3)	-10.78	-18.06	-12.49	-14.41	2.40
Mixed Asset SGD Balanced (5)	-4.36	-5.57	-1.10	1.65	14.23
Mixed Asset USD Aggressive (1)	-4.80	-8.20	0.33	3.97	31.24
Mixed Asset USD Bal - Global (1)	-4.19	-5.94	-1.06	-0.10	28.95
Target Maturity Other (4)	-1.45	-3.63	-1.19	0.59	9.44
Equity US (6)	-3.59	-3.42	3.33	11.90	66.59
Absolute Return Other (1)	-13.37	-10.24	-4.49	-5.10	22.13
Equity Sector Healthcare (2)	-4.65	-3.67	8.44	21.08	94.10
Equity Sector Financials (1)	-6.63	-9.35	-6.97	0.44	31.56
Bond Asia Pacific LC (2)	-0.08	0.10	1.28	1.83	5.07
Grand Total (117)	-7.10	-7.26	-2.82	-0.47	18.98

Source: Thomson Reuters Lipper

**Remark:** The average calculation includes the different share classes of the funds.

<sup>5</sup> For more information please go to Section 7.2—Investment Terminology Definitions.

The average returns of CPFIS-included ILPs by Lipper Global Classification are shown below:

**Table 7 Average Performance of CPFIS-Included ILPs by Lipper Global Classification (% Growth in SGD)**

Name	% Growth	% Growth	% Growth	% Growth	% Growth
	3M 30/06/2015	6M 31/03/2014	9M 31/12/2014	1Y 30/09/2014	3Y 30/09/2012
	To 30/09/2015	To 30/09/2015	To 30/09/2015	To 30/09/2015	30/09/2015
Bond Global (12)	2.15	-0.28	1.45	3.20	6.47
Bond SGD (6)	0.80	0.23	1.31	2.39	4.00
Equity ASEAN (2)	-16.49	-22.52	-19.61	-30.34	-6.62
Equity Asia Pacific (1)	-7.59	-11.79	-4.27	-2.31	13.97
Equity Asia Pacific ex Japan (12)	-11.37	-14.22	-8.80	-7.00	3.09
Equity Asia Pacific Sm&Mid Cap (4)	-15.76	-17.72	-10.57	-13.84	8.36
Equity China (4)	-18.86	-11.99	-4.57	2.92	27.64
Equity Emerging Mkts Asia (1)	-8.23	-6.83	0.92	8.45	29.74
Equity Emerging Mkts Global (6)	-9.65	-12.79	-8.21	-7.19	-0.67
Equity Europe (5)	-4.61	-4.81	2.80	3.03	35.67
Equity Global (23)	-6.45	-8.61	-3.85	-1.09	23.95
Equity Greater China (4)	-16.35	-12.04	-4.21	4.34	27.61
Equity India (4)	-1.32	-6.09	3.59	8.63	35.41
Equity Japan (5)	-9.42	-8.25	2.76	3.33	43.42
Equity Sector Information Tech (4)	-1.64	-3.08	4.82	14.71	60.02
Equity Sector Real Est Global (2)	3.35	-5.23	2.34	14.71	37.22
Equity Singapore (10)	-13.39	-14.91	-13.41	-12.22	-1.21
Mixed Asset SGD Aggressive (11)	-7.28	-9.72	-6.08	-3.88	11.74
Mixed Asset SGD Balanced (34)	-4.22	-6.10	-2.27	0.41	13.57
Mixed Asset SGD Conservative (9)	-0.86	-2.87	-0.22	1.85	8.76
Mixed Asset USD Aggressive (1)	-4.66	-8.15	0.35	3.93	31.38
Mixed Asset USD Bal - Global (1)	-4.28	-6.02	-1.24	0.77	0.00
Money Market SGD (6)	0.21	0.35	0.41	0.44	1.17
Target Maturity Other (6)	-3.33	-5.23	-0.79	1.71	14.16
Equity US (1)	-3.07	-4.08	0.50	10.68	69.10
Bond Other Hedged (1)	2.76	-1.24	1.53	4.29	4.84
Equity Sector Healthcare (2)	-4.61	-3.72	8.54	21.27	94.31
Bond Asia Pacific LC (1)	-0.94	-1.61	-1.42	-1.61	0.00
Grand Total (178)	-5.86	-7.52	-3.02	-0.49	16.10

Source: Thomson Reuters Lipper

**Remark:** The average calculation includes the different share classes of the funds.

## 6 SUMMARY OF RISK-ADJUSTED PERFORMANCE

The Lipper Leader rating methodology consists of four metrics that rate funds' success in meeting certain goals:

- **Total Return: Ability of a fund to provide superior total return compared to its peers**
- **Consistent Return: Ability of a fund to provide relatively superior consistency and risk-adjusted return compared to its peers**
- **Preservation: Ability of a fund to demonstrate superior preservation of capital in a variety of markets compared with other funds in its asset class**
- **Expense: Ability of a fund to successfully manage to keep its expenses low relative to its peers and within its load structure**

Funds are ranked against their Lipper peer group classifications for a three-year period. In other words, if a fund doesn't have at least three years of historical performance and it is not in a group with more than five funds, it is not rated by Lipper. The rating is based on an equal-weighted average of percentile ranks of the four Lipper Leader metrics.

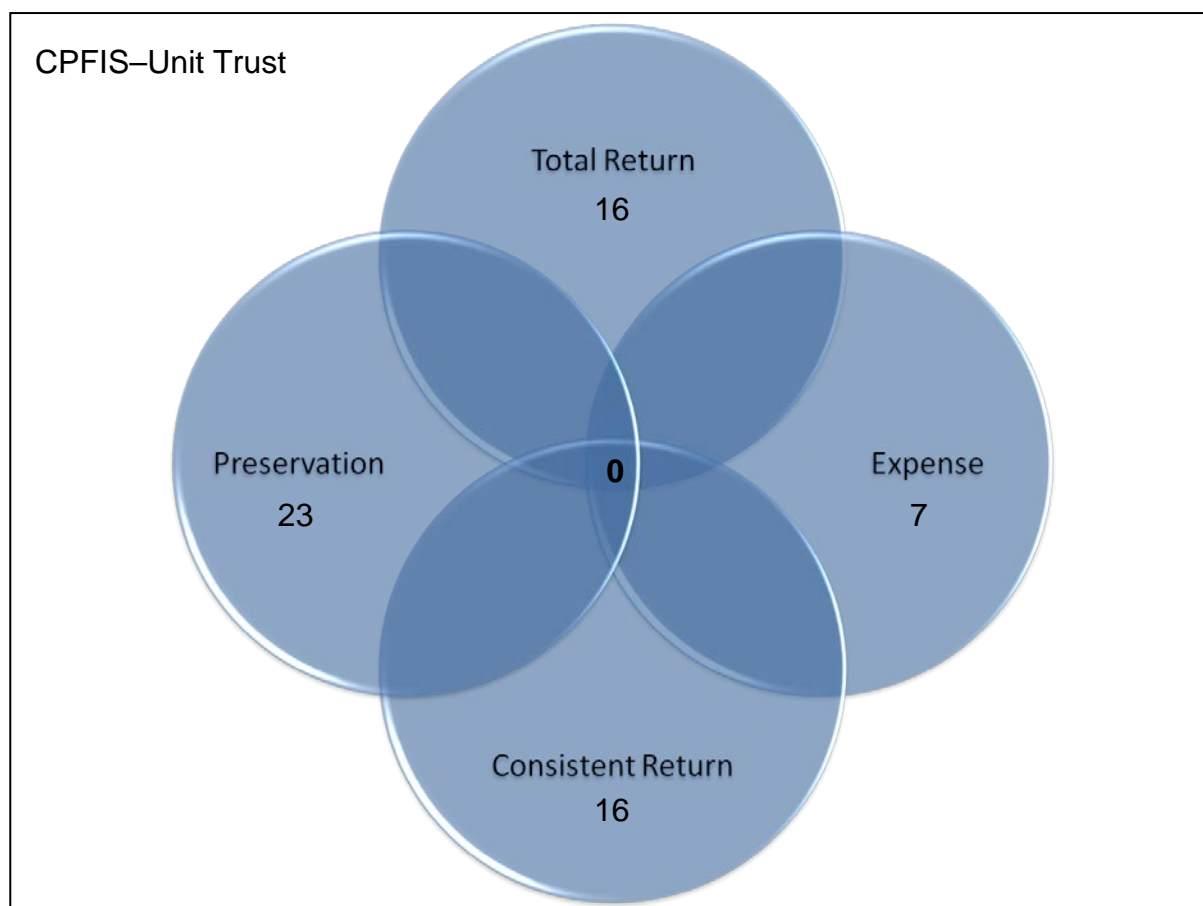
For each metric:

- The top 20% of funds receive a rating of "5" and are named **Lipper Leaders**.
- The next 20% of funds receive a rating of "4."
- The middle 20% of funds receive a rating of "3."
- The next 20% of funds receive a rating of "2."
- The lowest 20% of funds receive a rating of "1."



## 6.1 Lipper Leader Rating for CPFIS-Included Unit Trusts

Figure 6 Venn Diagram of CPFIS–Included Unit Trusts With a Lipper Leader Rating (Rating of “5”)



Source: Thomson Reuters Lipper

As of the end of September 2015 the number of CPFIS-included unit trusts in the top 20% of funds, receiving a rating of “5” and named Lipper Leaders in each metric, was as follows:

- Total Return: 16 funds
- Consistent Return: 16 funds
- Preservation: 23 funds
- Expense: 7 funds

There’s no any CPFIS-included unit trusts received a rating of “5” (Lipper Leader) in all four metrics.



**Table 8 Full List of CPFIS-Included Unit Trusts with a Lipper Leader Rating**

Name	Lipper Global Classification	3 Years Lipper Rating			
		Consistent Return	Expense	Total Return	Preservation
Aberdeen Asian Smaller Companies Fund SGD	Equity Asia Pacific Sm&Mid Cap	1	3	1	2
Aberdeen China Opportunities Fund	Equity Greater China	1	4	1	2
Aberdeen European Opportunities Fund	Equity Europe	1	3	1	2
Aberdeen Global Emerging Markets Fund SGD	Equity Emerging Mkts Global	2	3	2	2
Aberdeen Global Opportunities Fund SGD	Equity Global	1	3	1	4
Aberdeen India Opportunities Fund SGD	Equity India	2	3	2	1
Aberdeen Indonesia Equity Fund SGD	Equity Indonesia	1	4	1	1
Aberdeen Malaysian Equity Fund SGD	Equity Malaysia	3	3	4	1
Aberdeen Pacific Equity Fund SGD	Equity Asia Pacific ex Japan	2	3	1	3
Aberdeen Singapore Equity Fund SGD	Equity Singapore	3	3	2	2
Aberdeen Thailand Equity Fund SGD	Equity Thailand	4	4	Leader	1
AllianceBernstein - Global Equity Blend Portfolio A SGD	Equity Global	4	2	4	4
AllianceBernstein - Global Growth Trends Portfolio A SGD	Equity Global	3	2	3	4
AllianceBernstein - International Health Care Portfolio A SGD	Equity Sector Healthcare	2	2	2	Leader
Allianz China Equity AT SGD	Equity China	4	3	4	1
Allianz Global Investors Premier Funds - Allianz Global High Payout Fund SGD	Equity Global Income	2	2	2	Leader
Allianz Hong Kong Equity AT SGD	Equity Hong Kong	4	3	Leader	2
Allianz Oriental Income AT SGD	Mixed Asset USD Aggressive	3	4	3	2
Amundi Opportunities-Amundi Singapore Dividend Growth	Equity Singapore	1	3	1	2
APS Alpha Fund A SGD	Absolute Return Other	Leader	Leader	Leader	3
Capital Group European Growth and Income (LUX) Fund Class B CHF	Equity Europe	Leader	3	Leader	4
Capital Group European Growth and Income (LUX) Fund Class B EUR	Equity Europe	Leader	3	Leader	4
Capital Group European Growth and Income (LUX) Fund Class B GBP	Equity Europe	Leader	3	Leader	4
Capital Group European Growth and Income (LUX) Fund Class B USD	Equity Europe	Leader	3	Leader	4
Capital Group Global Growth and Income (LUX) Fund Class B CHF	Equity Global	2	3	2	Leader
Capital Group Global Growth and Income (LUX) Fund Class B EUR	Equity Global	2	3	2	Leader
Capital Group Global Growth and Income (LUX) Fund Class B GBP	Equity Global	2	3	2	Leader
Capital Group Global Growth and Income (LUX) Fund Class B USD	Equity Global	2	3	2	Leader
Deutsche China Equity Fund A SGD	Equity China	2	3	2	1
Deutsche Global Themes Equity Fund A SGD	Equity Global	2	3	2	3
Deutsche Lion Bond Fund A SGD	Bond Global	2	Leader	1	Leader
Deutsche Premier Select Trust SGD	Mixed Asset SGD Balanced	3	4	3	4
Eastspring Investments U.T. - Asian Balanced Fund	Mixed Asset SGD Balanced	2	4	2	3
Eastspring Investments U.T. - Dragon Peacock Fund	Equity Emerging Mkts Asia	Leader	4	Leader	2
Eastspring Investments U.T. - Global Technology Fund	Equity Sector Information Tech	3	4	3	4
Eastspring Investments U.T. - Pan European Fund	Equity Europe	3	3	3	4
Eastspring Investments U.T. - Singapore ASEAN Equity Fund	Equity Singapore	1	3	1	2
Eastspring Investments U.T. - Singapore Select Bond Fund A	Bond SGD	4	3	4	Leader



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Name	Lipper Global Classification	3 Years Lipper Rating			
		Consistent Return	Expense	Total Return	Preservation
First State Asian Growth Fund SGD	Equity Asia Pacific ex Japan	4	3	Leader	4
First State Bridge	Mixed Asset SGD Balanced	4	Leader	4	4
First State Dividend Advantage SGD	Equity Asia Pacific ex Japan	Leader	4	Leader	4
First State Global Resources Fund SGD	Equity Global	1	3	1	1
First State Regional China Fund SGD	Equity Greater China	3	4	3	3
FTIF - Franklin Biotechnology Discovery Fund A Acc SGD	Equity Sector Biotechnology	N/A	N/A	N/A	1
FTIF - Franklin Global Growth Fund A Acc SGD	Equity Global	2	3	2	4
FTIF - Franklin Gold And Precious Metals Fund A Acc SGD	Equity Sector Gold&Prec Metals	Leader	4	4	1
FTIF - Franklin India Fund A Acc SGD	Equity India	4	4	4	1
FTIF - Franklin U.S. Opportunities Fund A Acc SGD	Equity US	Leader	3	Leader	4
FTIF - Templeton Asian Growth Fund A Acc SGD	Equity Asia Pacific ex Japan	1	2	1	1
FTIF - Templeton China Fund A Acc SGD	Equity Greater China	1	2	1	1
FTIF - Templeton Emerging Markets Fund A Acc SGD	Equity Emerging Mkts Global	1	1	1	1
FTIF - Templeton European Fund A Acc SGD	Equity Europe	1	3	3	3
FTIF - Templeton Global Balanced Fund A Acc SGD	Mixed Asset USD Bal - Global	2	4	3	4
FTIF - Templeton Global Equity Income Fund A Qdis SGD	Equity Global Income	3	3	3	4
FTIF - Templeton Global Fund A Acc SGD	Equity Global	4	3	4	Leader
FTIF - Templeton Korea Fund A Acc SGD	Equity Korea	3	2	3	2
FTIF - Templeton Thailand Fund A Acc SGD	Equity Thailand	3	2	3	1
Henderson European Fund	Equity Europe	Leader	2	4	4
Henderson Global Property Equities Fund	Equity Sector Real Est Global	2	3	2	3
Henderson Global Technology Fund	Equity Sector Information Tech	3	3	3	4
Legg Mason Western Asset Asian Enterprise Trust	Equity Asia Pacific Sm&Mid Cap	1	4	1	2
Legg Mason Western Asset Global Bond Trust	Bond Global	3	4	3	4
Legg Mason Western Asset SE Asia Special Situations Trust	Equity ASEAN	1	4	2	1
Legg Mason Western Asset Singapore Bond Fund	Bond SGD	3	2	3	Leader
LionGlobal China Growth Fund SGD	Equity Greater China	2	Leader	2	2
LionGlobal Japan Growth Fund SGD	Equity Japan	4	3	4	4
LionGlobal Short Duration Bond Fund	Bond Global	3	Leader	3	Leader
LionGlobal Singapore Fixed Income Investment	Bond SGD	2	3	2	Leader
LionGlobal Singapore/Malaysia Fund SGD	Equity Malaysia/Singapore	3	N/A	3	2
LionGlobal Thailand Fund SGD	Equity Thailand	1	3	1	1
Nikko AM Shenton Japan Fund	Equity Japan	4	4	4	3
Nikko AM Shenton Short Term Bond Funds-Nikko AM Shenton Short Term Bond Fund (S\$)	Bond Global	2	Leader	2	Leader
Nikko AM Shenton Thrift Fund	Equity Singapore	4	Leader	4	2
PineBridge Global Funds - Asia Ex Japan Small Cap Equity Fund - Class A	Equity Asia Pacific Sm&Mid Cap	Leader	1	Leader	4
PineBridge Global Funds - Asia Ex Japan Small Cap Equity Fund - Class Y	Equity Asia Pacific Sm&Mid Cap	Leader	4	Leader	4
PineBridge Global Funds - US Large Cap Research Enhanced Fund – Class Y	Equity US	Leader	4	4	Leader
PineBridge International Funds - Acorns of Asia Balanced Fund	Mixed Asset SGD Balanced	3	4	3	4
PineBridge International Funds - Singapore Bond Fund	Bond SGD	3	1	3	Leader



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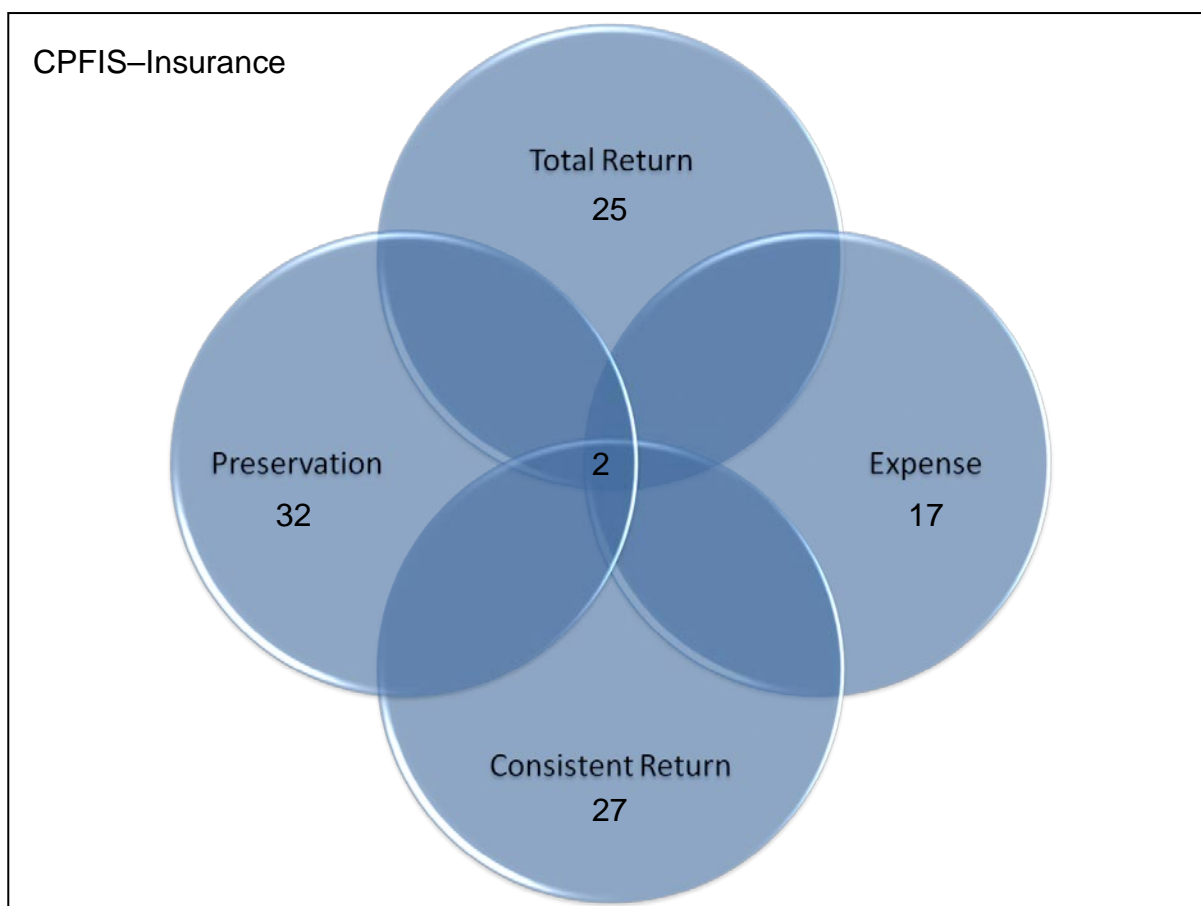
Name	Lipper Global Classification	3 Years Lipper Rating			
		Consistent Return	Expense	Total Return	Preservation
Schroder Asian Equity Yield Fund	Equity Asia Pacific ex Japan	3	3	3	4
Schroder Asian Growth Fund SGD	Equity Asia Pacific ex Japan	4	4	4	3
Schroder Asian Investment Grade Credit	Bond Asia Pacific LC	2	4	2	Leader
Schroder China Opportunities Fund	Equity China	4	3	3	2
Schroder Global Emerging Market Opportunities Fund	Equity Emerging Mkts Global	4	3	4	2
Schroder Greater China Fund	Equity Greater China	3	3	3	2
Schroder Multi-Asset Revolution	Mixed Asset SGD Balanced	4	4	4	Leader
Schroder Singapore Fixed Income Fund	Bond SGD	1	2	1	4
Schroder Singapore Trust	Equity Singapore	Leader	4	Leader	3
United Asia Top-50 Fund	Equity Asia Pacific	2	1	2	4
United Global Financials Fund	Equity Sector Financials	1	3	1	4
United Global Healthcare Fund	Equity Sector Healthcare	Leader	2	Leader	4
United International Growth Fund	Equity Global	2	4	2	4
United SGD Fund	Bond SGD	Leader	3	Leader	Leader
United Singapore Bond Fund	Bond SGD	3	2	3	Leader
United Singapore Growth Fund	Equity Singapore	2	4	2	2
UOB GrowthPath 2020	Target Maturity Other	1	3	1	Leader
UOB GrowthPath 2030	Target Maturity Other	2	1	2	Leader
UOB GrowthPath 2040	Target Maturity Other	2	3	3	Leader
UOB GrowthPath Today	Target Maturity Other	1	3	1	Leader

Source: Thomson Reuters Lipper



## 6.2 Lipper Leader Rating for CPFIS-Included ILPs

Figure 7 Venn Diagram of CPFIS-Included ILPs With a Lipper Leader Rating (Rating of “5”)



Source: Thomson Reuters Lipper

As of the end of September 2015 the number of CPFIS-included ILPs in the top 20% of funds, receiving a rating of “5” and named Lipper Leaders, in each metric was as follows:

- Total Return: 25 funds
- Consistent Return: 27 funds
- Preservation: 32 funds
- Expense: 17 funds

Two of the CPFIS-included ILPs received a rating of “5” (Lipper Leader) in all four metrics combined. They are: NTUC Global Managed Fund (Balanced) and NTUC Global Managed Fund (Conservative).

**Table 9 Full List of CPFIS-Included ILPs with a Lipper Leader Rating**

Name	Lipper Global Classification	3 Years Lipper Rating			
		Consistent Return	Expense	Total Return	Preservation
AIA Acorns of Asia Fund	Mixed Asset SGD Balanced	3	4	3	3
AIA Emerging Markets Balanced Fund	Mixed Asset SGD Balanced	2	2	2	2
AIA Emerging Markets Equity Fund	Equity Emerging Mkts Global	4	3	4	2
AIA Global Balanced Fund	Mixed Asset SGD Balanced	Leader	2	Leader	4
AIA Global Bond Fund	Bond Other Hedged	2	2	2	4
AIA Global Resources Fund	Equity Global	1	3	1	1
AIA Global Technology Fund	Equity Sector Information Tech	Leader	3	Leader	3
AIA Greater China Balanced Fund	Mixed Asset SGD Balanced	Leader	2	Leader	2
AIA Greater China Equity Fund	Equity Greater China	Leader	3	4	2
AIA Growth Fund	Mixed Asset SGD Aggressive	1	Leader	1	1
AIA India Balanced Fund	Mixed Asset SGD Balanced	Leader	2	Leader	1
AIA India Opportunities Fund	Equity India	2	3	2	1
AIA International Health Care Fund	Equity Sector Healthcare	2	2	2	4
AIA Japan Balanced Fund	Mixed Asset SGD Balanced	Leader	3	Leader	3
AIA Japan Equity Fund	Equity Japan	3	3	2	3
AIA Portfolio 100	Equity Global	2	3	1	Leader
AIA Portfolio 30	Mixed Asset SGD Conservative	Leader	4	Leader	Leader
AIA Portfolio 50	Mixed Asset SGD Balanced	3	2	3	Leader
AIA Portfolio 70	Mixed Asset SGD Aggressive	Leader	2	Leader	4
AIA Regional Fixed Income Fund	Bond SGD	3	2	3	Leader
Aviva Aberdeen Pacific Equity (SP)	Equity Asia Pacific ex Japan	1	1	1	2
Aviva AllianceBernstein Global Growth Trends (SP)	Equity Global	2	1	2	3
Aviva Balanced Growth (SP)	Mixed Asset SGD Balanced	2	1	2	2
Aviva Capital Growth (SP)	Equity Asia Pacific ex Japan	2	2	2	3
Aviva Henderson European (SP)	Equity Europe	4	2	4	4
Aviva Income Growth (SP)	Mixed Asset SGD Conservative	2	1	1	Leader
Aviva Legg Mason Western Asset Asian Enterprise Trust (SP)	Equity Asia Pacific Sm&Mid Cap	1	3	1	2
Aviva Legg Mason Western Asset Global Bond Trust (SP)	Bond Global	2	1	2	4
Aviva LionGlobal Japan Growth (SP)	Equity Japan	1	1	2	2
Aviva MM Balanced Growth	Mixed Asset SGD Balanced	2	Leader	2	3
Aviva MM Capital Growth	Equity Asia Pacific ex Japan	3	Leader	3	4
Aviva MM Income Growth	Mixed Asset SGD Conservative	3	4	3	Leader
Aviva Nikko AM Shenton Short Term Bond (SP)	Bond Global	1	1	1	Leader
Aviva Schroder Multi Asset Revolution	Mixed Asset SGD Balanced	4	3	4	4
Aviva Templeton Global Balanced (SP)	Mixed Asset SGD Balanced	4	1	Leader	3
AXA Asian Balanced Fund	Mixed Asset SGD Balanced	3	2	2	3
AXA Asian Growth Fund	Equity Asia Pacific ex Japan	2	3	2	3
AXA China Growth Fund	Equity Greater China	2	3	2	2
AXA Fortress Fund A	Equity Singapore	Leader	2	Leader	3
AXA Fortress Fund B	Equity Singapore	Leader	1	Leader	3
AXA Global Balanced Fund	Mixed Asset SGD Balanced	4	3	3	Leader
AXA Global Defensive Fund	Bond Global	3	3	3	4
AXA Global Emerging Markets Equity Fund	Equity Emerging Mkts Global	4	3	4	2
AXA Global Equity Blend	Equity Global	4	2	4	4



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Name	Lipper Global Classification	3 Years Lipper Rating			
		Consistent Return	Expense	Total Return	Preservation
AXA Global Growth Fund	Mixed Asset SGD Aggressive	Leader	3	Leader	4
AXA Global High Growth Fund	Equity Global	3	2	2	4
AXA Global Secure Fund	Mixed Asset SGD Conservative	4	4	4	Leader
AXA India Fund	Equity India	2	3	2	1
AXA Pacific Equity Fund	Equity Asia Pacific ex Japan	1	3	1	3
AXA Singapore Balanced Fund	Mixed Asset SGD Balanced	1	2	1	2
AXA Singapore Equity Fund	Equity Singapore	2	1	2	2
AXA Value Growth Fund	Equity Asia Pacific ex Japan	3	3	2	4
GreatLink Asia Pacific Equity Fund	Equity Asia Pacific ex Japan	1	3	1	2
GreatLink China Growth Fund	Equity Greater China	2	4	2	2
GreatLink European Equity Fund	Equity Europe	Leader	2	Leader	4
GreatLink Global Bond Fund	Bond Global	2	4	1	4
GreatLink Global Equity Alpha Fund	Equity Global	3	2	2	4
GreatLink Global Equity Fund	Equity Global	Leader	3	Leader	Leader
GreatLink Global Growth Trends Portfolio	Equity Global	3	3	3	4
GreatLink Global Opportunities Fund	Equity Global	1	3	1	4
GreatLink Global Optimum Fund	Mixed Asset SGD Balanced	Leader	3	4	Leader
GreatLink Global Real Estate Securities Fund	Equity Sector Real Est Global	Leader	4	Leader	4
GreatLink Global Supreme Fund	Mixed Asset SGD Balanced	Leader	3	Leader	Leader
GreatLink Global Technology Fund	Equity Sector Information Tech	Leader	4	Leader	4
GreatLink Lifestyle Balanced Portfolio	Mixed Asset SGD Balanced	3	3	2	4
GreatLink LifeStyle Dynamic Portfolio	Equity Global	1	2	1	4
GreatLink LifeStyle Progressive Portfolio	Mixed Asset SGD Aggressive	3	3	3	3
GreatLink Lifestyle Secure Portfolio	Mixed Asset SGD Conservative	3	4	3	Leader
GreatLink Lifestyle Steady Portfolio	Mixed Asset SGD Balanced	2	Leader	2	Leader
GreatLink Lion Asian Balanced Fund	Mixed Asset SGD Balanced	1	3	1	3
GreatLink Lion Japan Growth Fund	Equity Japan	2	2	1	3
GreatLink Short Duration Bond Fund	Bond Global	2	Leader	2	Leader
GreatLink Singapore Equities Fund	Equity Singapore	2	3	1	2
HSBC Insurance China Equity Fund	Equity China	3	3	3	2
HSBC Insurance Ethical Global Equity Fund	Equity Global	1	3	1	3
HSBC Insurance Global Bond Fund	Bond Global	3	4	3	Leader
HSBC Insurance Global Equity Fund	Equity Global	4	3	4	4
HSBC Insurance Pacific Equity Fund	Equity Asia Pacific ex Japan	1	3	1	2
HSBC Insurance Premium Balanced Fund	Mixed Asset SGD Balanced	3	3	3	3
HSBC Insurance Singapore Bond Fund	Bond Global	2	Leader	1	Leader
John Hancock Adventurous Portfolio	Mixed Asset SGD Aggressive	4	2	4	3
John Hancock Balanced Portfolio	Mixed Asset SGD Balanced	4	2	4	4
John Hancock Cautious Portfolio	Mixed Asset SGD Conservative	Leader	2	Leader	Leader
John Hancock European Equity Fund	Equity Europe	1	2	1	2
John Hancock Global Balanced Fund	Mixed Asset SGD Balanced	4	1	4	4



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Name	Lipper Global Classification	3 Years Lipper Rating			
		Consistent Return	Expense	Total Return	Preservation
John Hancock Greater China Fund	Equity China	2	3	2	1
John Hancock Japan Growth Fund	Equity Japan	3	2	3	3
John Hancock Pacific Equity Fund	Equity Asia Pacific Sm&Mid Cap	1	3	1	2
John Hancock Pacific Harvest Fund	Mixed Asset SGD Aggressive	3	2	3	2
John Hancock Worldwide Bond Fund	Bond Global	3	2	2	4
John Hancock Worldwide Equities Fund	Equity Global	2	2	1	4
Manulife European Equity Fund	Equity Europe	1	3	1	2
Manulife Global Emerging Markets Fund	Equity Emerging Mkts Global	2	3	2	2
Manulife Golden Asia Growth Fund	Equity Asia Pacific Sm&Mid Cap	1	3	1	2
Manulife Golden Balanced Growth Fund	Mixed Asset SGD Balanced	2	Leader	2	3
Manulife Golden Global Balanced Fund	Mixed Asset SGD Balanced	Leader	3	4	4
Manulife Golden International Bond Fund	Bond Global	3	4	3	4
Manulife Golden Regional China Fund	Equity China	2	3	2	1
Manulife Golden S.E.A. Special Situations Fund	Equity ASEAN	1	4	2	1
Manulife Golden Singapore Growth Fund	Equity Singapore	4	2	4	2
Manulife Golden Worldwide Equity Fund	Equity Global	2	3	1	4
Manulife India Equity Fund	Equity India	2	3	2	1
Manulife Japan Growth Fund	Equity Japan	3	3	3	3
Manulife Lifestyle Portfolios - Aggressive	Equity Global	1	3	1	4
Manulife Lifestyle Portfolios - Conservative	Mixed Asset SGD Conservative	Leader	3	Leader	Leader
Manulife Lifestyle Portfolios - Growth	Mixed Asset SGD Aggressive	4	3	3	3
Manulife Lifestyle Portfolios - Moderate	Mixed Asset SGD Balanced	3	4	3	4
Manulife Lifestyle Portfolios - Secure	Mixed Asset SGD Balanced	4	Leader	4	Leader
Manulife Pacific Equity Fund	Equity Asia Pacific ex Japan	1	3	1	3
Manulife Singapore Bond Fund	Bond SGD	3	1	3	Leader
NTUC AIM 2015	Target Maturity Other	1	4	1	Leader
NTUC AIM 2025	Target Maturity Other	2	2	2	Leader
NTUC AIM 2035	Target Maturity Other	3	2	3	4
NTUC AIM 2045	Target Maturity Other	3	2	4	4
NTUC AIM NOW	Mixed Asset SGD Conservative	3	Leader	3	Leader
NTUC Asia Managed Fund	Mixed Asset SGD Aggressive	3	4	3	2
NTUC Global Bond Fund	Bond Global	2	4	1	4
NTUC Global Equity Fund	Equity Global	4	4	4	Leader
NTUC Global Managed Fund (Balanced)	Mixed Asset SGD Balanced	Leader	Leader	Leader	Leader
NTUC Global Managed Fund (Conservative)	Mixed Asset SGD Conservative	Leader	Leader	Leader	Leader
NTUC Global Managed Fund (Growth)	Mixed Asset SGD Aggressive	Leader	Leader	Leader	4
NTUC Global Technology Fund	Equity Sector Information Tech	2	4	3	2
NTUC Prime Fund	Mixed Asset SGD Balanced	2	Leader	2	2
NTUC Singapore Bond Fund	Bond SGD	2	4	2	4
NTUC Singapore Equity Fund	Equity Singapore	3	Leader	3	2
NTUC Singapore Managed Fund	Mixed Asset SGD Balanced	1	Leader	1	2



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Name	Lipper Global Classification	3 Years Lipper Rating			
		Consistent Return	Expense	Total Return	Preservation
NTUC Takaful Fund	Equity Global	Leader	4	Leader	Leader
PruLink Adapt 2025	Target Maturity Other	3	1	2	4
PruLink Adapt 2035	Target Maturity Other	4	1	3	4
PruLink America Fund	Equity US	Leader	2	Leader	Leader
PruLink Asian American Managed Fund	Mixed Asset SGD Balanced	2	4	2	3
PruLink Asian Equity Fund	Equity Asia Pacific ex Japan	1	4	1	2
PruLink China-India Fund	Equity Emerging Mkts Asia	Leader	4	Leader	2
PruLink Emerging Markets Fund	Equity Emerging Mkts Global	3	3	2	2
PruLink Global Basics Fund	Equity Global	1	3	1	3
PruLink Global Bond Fund	Bond Global	2	4	1	4
PruLink Global Equity Fund	Equity Global	1	3	1	4
PruLink Global Managed Fund	Mixed Asset SGD Balanced	4	3	4	Leader
PruLink Global Property Securities Fund	Equity Sector Real Est Global	3	3	3	3
PruLink Global Technology Fund	Equity Sector Information Tech	3	4	3	4
PruLink Greater China Fund	Equity Greater China	3	4	3	2
PruLink Oriental Opportunities Fund	Mixed Asset USD Aggressive	3	3	3	2
PruLink Pan European Fund	Equity Europe	3	3	3	4
PruLink Singapore ASEAN Managed Fund	Mixed Asset SGD Aggressive	1	4	1	1
PruLink Singapore Dynamic Bond Fund	Bond SGD	4	3	4	Leader
PruLink Singapore Growth Fund	Equity Singapore	3	4	3	3
PruLink Singapore Managed Fund	Mixed Asset SGD Aggressive	2	Leader	1	1
TMLS Asian Equity Fund	Equity Asia Pacific ex Japan	2	3	1	3
TMLS China Equity Fund	Equity China	3	4	2	2
TMLS Global Balanced Fund	Mixed Asset SGD Balanced	3	Leader	3	4
TMLS Global Bond Fund	Bond Global	2	4	2	Leader
TMLS Global Equity Fund	Equity Global	1	3	1	4
UOB Life FOF Asia Top 50 Fund	Equity Asia Pacific	2	1	2	4
UOB Life FOF Global Healthcare Fund	Equity Sector Healthcare	Leader	2	Leader	4
UOB Life FOF Growth Fund	Equity Singapore	1	4	1	2

Source: Thomson Reuters Lipper





## 7 Appendices

### 7.1 Complete List of Funds <sup>6</sup>

#### 7.1.1 Full List of CPFIS-Included Unit Trusts

Name	Lipper Global	CPFIS Risk	CPF Focus	TER Date	Expense Ratio
FTIF - Templeton Korea Fund A Acc SGD	Equity Korea	Higher Risk	Narrowly Focused	30/06/2015	2.51
FTIF - Templeton Thailand Fund A Acc SGD	Equity Thailand	Higher Risk	Narrowly Focused	30/06/2015	2.50
FTIF - Templeton Emerging Markets Fund A Acc SGD	Equity Emerging Mkts Global	Higher Risk	Narrowly Focused	30/06/2015	2.47
FTIF - Templeton China Fund A Acc SGD	Equity Greater China	Higher Risk	Narrowly Focused	30/06/2015	2.44
PineBridge Global Funds - Asia Ex Japan Small Cap Equity Fund - Class A	Equity Asia Pacific Sm&Mid Cap	Higher Risk	Narrowly Focused	31/12/2014	2.28
FTIF - Templeton Asian Growth Fund A Acc SGD	Equity Asia Pacific ex Japan	Higher Risk	Narrowly Focused	30/06/2015	2.21
AllianceBernstein - International Health Care Portfolio A SGD	Equity Sector Healthcare	Higher Risk	Narrowly Focused	30/11/2015	2.18
AllianceBernstein - Global Equity Blend Portfolio A SGD	Equity Global	Higher Risk	Broadly Diversified	28/02/2015	2.10
United Global Healthcare Fund	Equity Sector Healthcare	Higher Risk	Narrowly Focused	30/06/2015	2.10
AllianceBernstein - Global Growth Trends Portfolio A SGD	Equity Global	Higher Risk	Broadly Diversified	28/02/2015	2.04
United Asia Top-50 Fund	Equity Asia Pacific	Higher Risk	Narrowly Focused	30/06/2015	2.04
Aberdeen Thailand Equity Fund SGD	Equity Thailand	Higher Risk	Narrowly Focused	31/05/2015	2.01
Aberdeen India Opportunities Fund SGD	Equity India	Higher Risk	Narrowly Focused	31/05/2015	1.95
Pinebridge India Equity Fund	Equity India	Higher Risk	Narrowly Focused	31/12/2014	1.94
Schroder Greater China Fund	Equity Greater China	Higher Risk	Narrowly Focused	30/06/2015	1.93
Allianz Global Investors Premier Funds - Allianz Global High Payout Fund SGD	Equity Global Income	Higher Risk	Broadly Diversified	30/06/2015	1.90
Franklin Templeton Shariah Funds - Templeton Shariah Global Equity Fund	Equity Global	Higher Risk	Broadly Diversified	30/04/2015	1.90
FTIF - Franklin Gold And Precious Metals Fund A Acc SGD	Equity Sector Gold&Prec Metals	Higher Risk	Narrowly Focused	30/06/2015	1.90
Henderson European Fund	Equity Europe	Higher Risk	Narrowly Focused	30/06/2015	1.90
LionGlobal Japan Growth Fund SGD	Equity Japan	Higher Risk	Narrowly Focused	30/06/2015	1.90
FTIF - Franklin India Fund A Acc SGD	Equity India	Higher Risk	Narrowly Focused	30/06/2015	1.89
Nikko AM Asia Investment Funds-Nikko AM Shenton Global Property Securities Fund SGD	Equity Sector Real Est Global	Higher Risk	Narrowly Focused	30/06/2015	1.88

<sup>6</sup> These expense ratios may not be up to end of June 2015 but already represent the most up-to-date information (which may include unaudited expense ratio) submitted by the FMCs/Insurers. Some funds which are newly launched or have newly launched share classes have no available data.

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Name	Lipper Global	CPFIS Risk	CPF Focus	TER Date	Expense Ratio
Nikko AM Asia Investment Funds-Nikko AM Shenton Global Property Securities Fund SGD	Equity Sector Real Est Global	Higher Risk	Narrowly Focused	30/06/2015	1.88
Allianz China Equity AT SGD	Equity China	Higher Risk	Narrowly Focused	31/03/2015	1.87
United Global Financials Fund	Equity Sector Financials	Higher Risk	Narrowly Focused	30/06/2015	1.86
FTIF - Franklin Global Growth Fund A Acc SGD	Equity Global	Higher Risk	Narrowly Focused	30/06/2015	1.85
Allianz Hong Kong Equity AT SGD	Equity Hong Kong	Higher Risk	Narrowly Focused	31/03/2015	1.84
FTIF - Templeton Global Equity Income Fund A Qdis SGD	Equity Global Income	Higher Risk	Broadly Diversified	30/06/2015	1.84
Henderson Global Property Equities Fund	Equity Sector Real Est Global	Higher Risk	Narrowly Focused	30/06/2015	1.84
Henderson Global Technology Fund	Equity Sector Information Tech	Higher Risk	Narrowly Focused	30/06/2015	1.84
Schroder China Opportunities Fund	Equity China	Higher Risk	Narrowly Focused	30/06/2015	1.84
Aberdeen European Opportunities Fund	Equity Europe	Higher Risk	Narrowly Focused	31/05/2015	1.83
Allianz Europe Equity Growth	Equity Europe	Higher Risk	Narrowly Focused	31/03/2015	1.83
Allianz Oriental Income AT SGD	Mixed Asset USD Aggressive	Higher Risk	Narrowly Focused	31/03/2015	1.83
FTIF - Templeton European Fund A Acc SGD	Equity Europe	Higher Risk	Narrowly Focused	30/06/2015	1.83
FTIF - Templeton Global Fund A Acc SGD	Equity Global	Higher Risk	Broadly Diversified	30/06/2015	1.83
FTIF - Franklin Biotechnology Discovery Fund A Acc SGD	Equity Sector Biotechnology	Higher Risk	Narrowly Focused	30/06/2015	1.81
FTIF - Franklin U.S. Opportunities Fund A Acc SGD	Equity US	Higher Risk	Narrowly Focused	30/06/2015	1.81
Aberdeen Asian Smaller Companies Fund SGD	Equity Asia Pacific Sm&Mid Cap	Higher Risk	Narrowly Focused	31/05/2015	1.80
Aberdeen Global Emerging Markets Fund SGD	Equity Emerging Mkts Global	Higher Risk	Narrowly Focused	31/05/2015	1.80
Aberdeen China Opportunities Fund	Equity Greater China	Higher Risk	Narrowly Focused	31/05/2015	1.79
Aberdeen Pacific Equity Fund SGD	Equity Asia Pacific ex Japan	Higher Risk	Narrowly Focused	31/05/2015	1.76
Schroder Global Emerging Market Opportunities Fund	Equity Emerging Mkts Global	Higher Risk	Narrowly Focused	30/06/2015	1.76
Aberdeen Global Opportunities Fund SGD	Equity Global	Higher Risk	Broadly Diversified	31/05/2015	1.75



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Name	Lipper Global	CPFIS Risk	CPF Focus	TER Date	Expense Ratio
Capital Group European Growth and Income (LUX) Fund Class B CHF	Equity Europe	Higher Risk	Narrowly Focused	30/06/2015	1.75
Capital Group European Growth and Income (LUX) Fund Class B EUR	Equity Europe	Higher Risk	Narrowly Focused	30/06/2015	1.75
Capital Group European Growth and Income (LUX) Fund Class B GBP	Equity Europe	Higher Risk	Narrowly Focused	30/06/2015	1.75
Capital Group European Growth and Income (LUX) Fund Class B USD	Equity Europe	Higher Risk	Narrowly Focused	30/06/2015	1.75
Capital Group Global Growth and Income (LUX) Fund Class B CHF	Equity Global	Higher Risk	Broadly Diversified	30/06/2015	1.75
Capital Group Global Growth and Income (LUX) Fund Class B EUR	Equity Global	Higher Risk	Broadly Diversified	30/06/2015	1.75
Capital Group Global Growth and Income (LUX) Fund Class B GBP	Equity Global	Higher Risk	Broadly Diversified	30/06/2015	1.75
Capital Group Global Growth and Income (LUX) Fund Class B USD	Equity Global	Higher Risk	Broadly Diversified	30/06/2015	1.75
Fidelity Funds-America Fund CPF-ACC-SGD	Equity US	Higher Risk	Narrowly Focused	30/04/2015	1.75
Fidelity Funds-America Fund CPF-ACC-SGD H	Equity US	Higher Risk	Narrowly Focused	30/04/2015	1.75
Fidelity Funds-America Fund CPF-ACC-USD	Equity US	Higher Risk	Narrowly Focused	30/04/2015	1.75
Fidelity Funds-Asian Special Situations Fund	Equity Asia Pacific ex Japan	Higher Risk	Narrowly Focused	30/04/2015	1.75
Fidelity Funds-China Focus Fund	Equity China	Higher Risk	Narrowly Focused	30/04/2015	1.75
Fidelity Funds-Emerging Markets Fund	Equity Emerging Mkts Global	Higher Risk	Narrowly Focused	30/04/2015	1.75
Fidelity Funds-European Growth Fund CPF-ACC-Euro	Equity Europe	Higher Risk	Narrowly Focused	30/04/2015	1.75
Fidelity Funds-European Growth Fund CPF-ACC-SGD	Equity Europe	Higher Risk	Narrowly Focused	30/04/2015	1.75
Fidelity Funds-Greater China Fund	Equity Greater China	Higher Risk	Narrowly Focused	30/04/2015	1.75
Fidelity Funds-Southeast Asia Fund	Equity Asia Pacific ex Japan	Higher Risk	Narrowly Focused	30/04/2015	1.75
First State Asian Growth Fund SGD	Equity Asia Pacific ex Japan	Higher Risk	Narrowly Focused	30/06/2015	1.75
Eastspring Investments U.T. - Global Technology Fund	Equity Sector Information Tech	Higher Risk	Narrowly Focused	30/06/2015	1.74
Eastspring Investments U.T. - Pan European Fund	Equity Europe	Higher Risk	Narrowly Focused	30/06/2015	1.74
Aberdeen Malaysian Equity Fund SGD	Equity Malaysia	Higher Risk	Narrowly Focused	31/05/2015	1.73



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Name	Lipper Global	CPFIS Risk	CPF Focus	TER Date	Expense Ratio
Schroder Asian Equity Yield Fund	Equity Asia Pacific ex Japan	Higher Risk	Narrowly Focused	30/06/2015	1.73
Aberdeen Indonesia Equity Fund SGD	Equity Indonesia	Higher Risk	Narrowly Focused	31/05/2015	1.72
Deutsche China Equity Fund A SGD	Equity China	Higher Risk	Narrowly Focused	30/06/2015	1.72
Legg Mason Western Asset Asian Enterprise Trust	Equity Asia Pacific Sm&Mid Cap	Higher Risk	Narrowly Focused	31/03/2015	1.72
Legg Mason Western Asset SE Asia Special Situations Trust	Equity ASEAN	Higher Risk	Narrowly Focused	31/03/2015	1.71
First State Regional China Fund SGD	Equity Greater China	Higher Risk	Narrowly Focused	30/06/2015	1.69
Nikko AM Global Dividend Equity Fund	Equity Global Income	Higher Risk	Broadly Diversified	30/06/2015	1.69
Deutsche Global Themes Equity Fund A SGD	Equity Global	Higher Risk	Broadly Diversified	30/06/2015	1.68
Eastspring Investments U.T. - Dragon Peacock Fund	Equity Emerging Mkts Asia	Higher Risk	Narrowly Focused	30/06/2015	1.68
First State Dividend Advantage SGD	Equity Asia Pacific ex Japan	Higher Risk	Narrowly Focused	30/06/2015	1.68
Eastspring Investments U.T. - Singapore ASEAN Equity Fund	Equity Singapore	Higher Risk	Narrowly Focused	30/06/2015	1.67
Aberdeen Singapore Equity Fund SGD	Equity Singapore	Higher Risk	Narrowly Focused	31/05/2015	1.66
First State Global Resources Fund SGD	Equity Global	Higher Risk	Narrowly Focused	30/06/2015	1.63
Eastspring Investments – Asian Equity Income Fund Class As Hedged	Equity Asia Pacific ex Japan	Higher Risk	Narrowly Focused	30/06/2015	1.56
LionGlobal China Growth Fund SGD	Equity Greater China	Higher Risk	Narrowly Focused	30/06/2015	1.54
Amundi Opportunities-Amundi Singapore Dividend Growth	Equity Singapore	Higher Risk	Narrowly Focused	31/05/2015	1.49
PineBridge Global Funds - Asia Ex Japan Small Cap Equity Fund - Class Y	Equity Asia Pacific Sm&Mid Cap	Higher Risk	Narrowly Focused	31/12/2014	1.47
LionGlobal Thailand Fund SGD	Equity Thailand	Higher Risk	Narrowly Focused	30/06/2015	1.45
LionGlobal Singapore/Malaysia Fund SGD	Equity Malaysia/Singapore	Higher Risk	Narrowly Focused	30/06/2015	1.42
Schroder Asian Growth Fund SGD	Equity Asia Pacific ex Japan	Higher Risk	Narrowly Focused	30/06/2015	1.38
PineBridge Global Funds - US Large Cap Research Enhanced Fund – Class Y	Equity US	Higher Risk	Narrowly Focused	31/12/2014	1.32
Schroder Singapore Trust	Equity Singapore	Higher Risk	Narrowly Focused	30/06/2015	1.31



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Name	Lipper Global	CPFIS Risk	CPF Focus	TER Date	Expense Ratio
Nikko AM Shenton Japan Fund	Equity Japan	Higher Risk	Narrowly Focused	30/06/2015	1.15
United Singapore Growth Fund	Equity Singapore	Higher Risk	Narrowly Focused	30/06/2015	1.14
Nikko AM Shenton Thrift Fund	Equity Singapore	Higher Risk	Narrowly Focused	30/06/2015	0.91
APS Alpha Fund A SGD	Absolute Return Other	Higher Risk	Narrowly Focused	30/06/2015	0.00
PineBridge US Large Cap Research Enhanced Fund - Class A5	Equity US	Higher Risk	Narrowly Focused	N/A	N/A
FTIF - Templeton Global Balanced Fund A Acc SGD	Mixed Asset USD Bal - Global	Medium To High Risk	Broadly Diversified	30/06/2015	1.63
UOB GrowthPath 2030	Target Maturity Other	Medium To High Risk	Broadly Diversified	30/06/2015	1.61
PineBridge International Funds - Acorns of Asia Balanced Fund	Mixed Asset SGD Balanced	Medium To High Risk	Narrowly Focused	30/06/2015	1.56
Schroder Multi-Asset Revolution	Mixed Asset SGD Balanced	Medium To High Risk	Broadly Diversified	30/06/2015	1.52
Eastspring Investments U.T. - Asian Balanced Fund	Mixed Asset SGD Balanced	Medium To High Risk	Narrowly Focused	30/06/2015	1.48
Deutsche Premier Select Trust SGD	Mixed Asset SGD Balanced	Medium To High Risk	Broadly Diversified	30/06/2015	1.45
First State Bridge	Mixed Asset SGD Balanced	Medium To High Risk	Narrowly Focused	30/06/2015	1.41
UOB GrowthPath 2020	Target Maturity Other	Medium To High Risk	Broadly Diversified	30/06/2015	1.13
UOB GrowthPath 2040	Target Maturity Other	Medium To High Risk	Broadly Diversified	30/06/2015	1.10
UOB GrowthPath Today	Target Maturity Other	Low To Medium Risk	Broadly Diversified	30/06/2015	1.13
PineBridge International Funds - Singapore Bond Fund	Bond SGD	Low To Medium Risk	Narrowly Focused	30/06/2015	1.11
Manulife Asia Pacific Investment Grade Bond Fund Class A	Bond Asia Pacific LC	Low To Medium Risk	Narrowly Focused	30/06/2015	1.02
Schroder Asian Investment Grade Credit	Bond Asia Pacific LC	Low To Medium Risk	Narrowly Focused	30/06/2015	0.98
Legg Mason Western Asset Singapore Bond Fund	Bond SGD	Low To Medium Risk	Narrowly Focused	31/03/2015	0.94
Legg Mason Western Asset Global Bond Trust	Bond Global	Low To Medium Risk	Broadly Diversified	31/03/2015	0.89
United Singapore Bond Fund	Bond SGD	Low To Medium Risk	Narrowly Focused	30/06/2015	0.74
Schroder Singapore Fixed Income Fund	Bond SGD	Low To Medium Risk	Narrowly Focused	30/06/2015	0.72
Deutsche Lion Bond Fund A SGD	Bond Global	Low To Medium Risk	Broadly Diversified	30/06/2015	0.68
LionGlobal Singapore Fixed Income Investment	Bond SGD	Low To Medium Risk	Narrowly Focused	30/06/2015	0.65
United SGD Fund	Bond SGD	Low To Medium Risk	Broadly Diversified	30/06/2015	0.64
LionGlobal Short Duration Bond Fund	Bond Global	Low To Medium Risk	Narrowly Focused	30/06/2015	0.63
Eastspring Investments U.T. - Singapore Select Bond Fund A	Bond SGD	Low To Medium Risk	Narrowly Focused	30/06/2015	0.62
Eastspring Investments U.T. - Singapore Select Bond Fund AD	Bond SGD	Low To Medium Risk	Narrowly Focused	30/06/2015	0.62
Nikko AM Shenton Short Term Bond Funds-Nikko AM Shenton Short Term Bond Fund (S\$)	Bond Global	Low To Medium Risk	Broadly Diversified	30/06/2015	0.40

Source: Central Provident Fund Board and Thomson Reuters Lipper

7.1.2 Full List of CPFIS-Included ILPs

Name (CPF)	Lipper Global	CPFIS Risk	CPF Focus	Detail	TER Date	Expense Ratio
Aviva AllianceBernstein Global Growth Trends (SP)	Equity Global	Higher Risk	Broadly Diversified	N/A	30/06/2015	3.62
Aviva LionGlobal Japan Growth (SP)	Equity Japan	Higher Risk	Narrowly Focused	Japan	30/06/2015	3.18
Aviva Aberdeen Pacific Equity (SP)	Equity Asia Pacific ex Japan	Higher Risk	Narrowly Focused	Asia	30/06/2015	2.93
UOB Life FOF Asia Top 50 Fund	Equity Asia Pacific	Higher Risk	Narrowly Focused	Asia	31/12/2014	2.31
UOB Life FOF Global Healthcare Fund	Equity Sector Healthcare	Higher Risk	Narrowly Focused	Healthcare	31/12/2014	2.21
AIA International Health Care Fund	Equity Sector Healthcare	Higher Risk	Narrowly Focused	Healthcare	30/06/2015	2.17
Aviva Capital Growth (SP)	Equity Asia Pacific ex Japan	Higher Risk	Narrowly Focused	Asia	30/06/2015	2.09
John Hancock European Equity Fund	Equity Europe	Higher Risk	Narrowly Focused	Europe	30/06/2015	2.07
GreatLink European Equity Fund	Equity Europe	Higher Risk	Narrowly Focused	Europe	31/07/2015	1.98
AIA India Opportunities Fund	Equity India	Higher Risk	Narrowly Focused	Country - Others	30/06/2015	1.95
AXA Fortress Fund A	Equity Singapore	Higher Risk	Narrowly Focused	Singapore	30/06/2015	1.95
AXA Fortress Fund B	Equity Singapore	Higher Risk	Narrowly Focused	Singapore	30/06/2015	1.95
AXA Global High Growth Fund	Equity Global	Higher Risk	Broadly Diversified	N/A	30/06/2015	1.95
AXA Singapore Equity Fund	Equity Singapore	Higher Risk	Narrowly Focused	Singapore	30/06/2015	1.95
Manulife India Equity Fund	Equity India	Higher Risk	Narrowly Focused	Country - Others	30/06/2015	1.95
Aviva Legg Mason Western Asset Asian Enterprise Trust (SP)	Equity Asia Pacific Sm&Mid Cap	Higher Risk	Narrowly Focused	Asia	30/06/2015	1.94
AXA Global Equity Blend	Equity Global	Higher Risk	Broadly Diversified	N/A	30/06/2015	1.94
AXA Value Growth Fund	Equity Asia Pacific ex Japan	Higher Risk	Narrowly Focused	Asia	30/06/2015	1.94
GreatLink LifeStyle Dynamic Portfolio	Equity Global	Higher Risk	Broadly Diversified	N/A	31/07/2015	1.93
AXA South East Asia Special Situations Fund	Equity ASEAN	Higher Risk	Narrowly Focused	Asia	30/06/2015	1.93
AIA Greater China Equity Fund	Equity Greater China	Higher Risk	Narrowly Focused	Greater China	30/06/2015	1.92
TMLS Global Equity Fund	Equity Global	Higher Risk	Broadly Diversified	N/A	30/06/2015	1.92

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Name (CPF)	Lipper Global	CPFIS Risk	CPF Focus	Detail	TER Date	Expense Ratio
AXA Global Emerging Markets Equity Fund	Equity Emerging Mkts Global	Higher Risk	Narrowly Focused	Emerging Markets	30/06/2015	1.91
GreatLink Global Equity Alpha Fund	Equity Global	Higher Risk	Broadly Diversified	N/A	31/07/2015	1.91
GreatLink Global Emerging Markets Equity Fund	Equity Emerging Mkts Global	Higher Risk	Narrowly Focused	Emerging Markets	31/07/2015	1.91
Aviva Henderson European (SP)	Equity Europe	Higher Risk	Narrowly Focused	Europe	30/06/2015	1.90
AXA China Growth Fund	Equity Greater China	Higher Risk	Narrowly Focused	Greater China	30/06/2015	1.90
John Hancock Greater China Fund	Equity China	Higher Risk	Narrowly Focused	Greater China	30/06/2015	1.90
Manulife Golden Regional China Fund	Equity China	Higher Risk	Narrowly Focused	Greater China	30/06/2015	1.90
HSBC Insurance Ethical Global Equity Fund	Equity Global	Higher Risk	Broadly Diversified	N/A	30/06/2015	1.90
Manulife Asia Small-Cap Equity Fund	Equity Asia Pacific Sm&Mid Cap	Higher Risk	Narrowly Focused	Asia	30/06/2015	1.90
AXA Pacific Equity Fund	Equity Asia Pacific ex Japan	Higher Risk	Narrowly Focused	Asia	30/06/2015	1.89
AIA Emerging Markets Equity Fund	Equity Emerging Mkts Global	Higher Risk	Narrowly Focused	Emerging Markets	30/06/2015	1.88
John Hancock Worldwide Equities Fund	Equity Global	Higher Risk	Broadly Diversified	N/A	30/06/2015	1.88
PruLink Oriental Opportunities Fund	Mixed Asset USD Aggressive	Higher Risk	Narrowly Focused	Asia	30/06/2015	1.88
GreatLink Global Opportunities Fund	Equity Global	Higher Risk	Broadly Diversified	N/A	31/07/2015	1.87
GreatLink Lion Japan Growth Fund	Equity Japan	Higher Risk	Narrowly Focused	Japan	31/07/2015	1.87
PruLink America Fund	Equity US	Higher Risk	Narrowly Focused	North America	30/06/2015	1.87
AXA Asian Growth Fund	Equity Asia Pacific ex Japan	Higher Risk	Narrowly Focused	Asia	30/06/2015	1.86
PruLink Emerging Markets Fund	Equity Emerging Mkts Global	Higher Risk	Narrowly Focused	Emerging Markets	30/06/2015	1.86
AIA Portfolio 100	Equity Global	Higher Risk	Broadly Diversified	N/A	30/06/2015	1.85
AXA India Fund	Equity India	Higher Risk	Narrowly Focused	Country - Others	30/06/2015	1.85
John Hancock Japan Growth Fund	Equity Japan	Higher Risk	Narrowly Focused	Japan	30/06/2015	1.85
AIA Global Technology Fund	Equity Sector Information Tech	Higher Risk	Narrowly Focused	Technology	30/06/2015	1.84
HSBC Insurance China Equity Fund	Equity China	Higher Risk	Narrowly Focused	Greater China	30/06/2015	1.84
GreatLink Asia Pacific Equity Fund	Equity Asia Pacific ex Japan	Higher Risk	Narrowly Focused	Asia	31/07/2015	1.84
Manulife Global Emerging Markets Fund	Equity Emerging Mkts Global	Higher Risk	Narrowly Focused	Emerging Markets	30/06/2015	1.83



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Name (CPF)	Lipper Global	CPFIS Risk	CPF Focus	Detail	TER Date	Expense Ratio
PruLink Greater China Fund	Equity Greater China	Higher Risk	Narrowly Focused	Greater China	30/06/2015	1.83
Manulife European Equity Fund	Equity Europe	Higher Risk	Narrowly Focused	Europe	30/06/2015	1.83
TMLS Global Emerging Markets Equity Fund	Equity Emerging Mkts Global	Higher Risk	Narrowly Focused	Emerging Markets	30/06/2015	1.83
Manulife Lifestyle Portfolios - Aggressive	Equity Global	Higher Risk	Broadly Diversified	N/A	30/06/2015	1.82
TMLS India Equity Fund	Equity India	Higher Risk	Narrowly Focused	Country - Others	30/06/2015	1.81
GreatLink Global Equity Fund	Equity Global	Higher Risk	Broadly Diversified	N/A	31/07/2015	1.80
GreatLink Global Growth Trends Portfolio	Equity Global	Higher Risk	Broadly Diversified	N/A	31/07/2015	1.80
PruLink Global Property Securities Fund	Equity Sector Real Est Global	Higher Risk	Narrowly Focused	Sector - Others	30/06/2015	1.80
HSBC Insurance Pacific Equity Fund	Equity Asia Pacific ex Japan	Higher Risk	Narrowly Focused	Asia	30/06/2015	1.80
Manulife Pacific Equity Fund	Equity Asia Pacific ex Japan	Higher Risk	Narrowly Focused	Asia	30/06/2015	1.79
HSBC Insurance Global Equity Fund	Equity Global	Higher Risk	Broadly Diversified	N/A	30/06/2015	1.79
Manulife Golden Singapore Growth Fund	Equity Singapore	Higher Risk	Narrowly Focused	Singapore	30/06/2015	1.78
PruLink Global Technology Fund	Equity Sector Information Tech	Higher Risk	Narrowly Focused	Technology	30/06/2015	1.77
GreatLink Global Technology Fund	Equity Sector Information Tech	Higher Risk	Narrowly Focused	Technology	31/07/2015	1.76
Manulife Golden Worldwide Equity Fund	Equity Global	Higher Risk	Broadly Diversified	N/A	30/06/2015	1.76
PruLink Global Equity Fund	Equity Global	Higher Risk	Broadly Diversified	N/A	30/06/2015	1.76
PruLink Pan European Fund	Equity Europe	Higher Risk	Narrowly Focused	Europe	30/06/2015	1.75
John Hancock Pacific Equity Fund	Equity Asia Pacific Sm&Mid Cap	Higher Risk	Narrowly Focused	Asia	30/06/2015	1.74
Manulife Golden Asia Growth Fund	Equity Asia Pacific Sm&Mid Cap	Higher Risk	Narrowly Focused	Asia	30/06/2015	1.74
GreatLink Singapore Equities Fund	Equity Singapore	Higher Risk	Narrowly Focused	Singapore	31/07/2015	1.73
Manulife Golden S.E.A. Special Situations Fund	Equity ASEAN	Higher Risk	Narrowly Focused	Asia	30/06/2015	1.73
GreatLink LifeStyle Progressive Portfolio	Mixed Asset SGD Aggressive	Higher Risk	Broadly Diversified	N/A	31/07/2015	1.72
GreatLink Global Real Estate Securities Fund	Equity Sector Real Est Global	Higher Risk	Narrowly Focused	Sector - Others	31/07/2015	1.71
Manulife Japan Growth Fund	Equity Japan	Higher Risk	Narrowly Focused	Japan	30/06/2015	1.71





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Name (CPF)	Lipper Global	CPFIS Risk	CPF Focus	Detail	TER Date	Expense Ratio
PruLink Adapt 2035	Target Maturity Other	Higher Risk	Broadly Diversified	N/A	30/06/2015	1.70
PruLink Global Basics Fund	Equity Global	Higher Risk	Broadly Diversified	N/A	30/06/2015	1.69
TMLS Singapore Equity Fund	Equity Singapore	Higher Risk	Narrowly Focused	Country - Singapore	30/06/2015	1.69
AIA Japan Equity Fund	Equity Japan	Higher Risk	Narrowly Focused	Japan	30/06/2015	1.68
AIA Regional Equity Fund	Equity Asia Pacific ex Japan	Higher Risk	Narrowly Focused	Asia	30/06/2015	1.68
Manulife Lifestyle Portfolios - Growth	Mixed Asset SGD Aggressive	Higher Risk	Broadly Diversified	N/A	30/06/2015	1.68
Prulink China-India Fund	Equity Emerging Mkts Asia	Higher Risk	Narrowly Focused	Country - Others	30/06/2015	1.68
TMLS China Equity Fund	Equity China	Higher Risk	Narrowly Focused	Greater China	30/06/2015	1.68
TMLS Asian Equity Fund	Equity Asia Pacific ex Japan	Higher Risk	Narrowly Focused	Asia	30/06/2015	1.66
AIA Global Resources Fund	Equity Global	Higher Risk	Narrowly Focused	Sector - Others	30/06/2015	1.63
GreatLink China Growth Fund	Equity Greater China	Higher Risk	Narrowly Focused	Greater China	31/07/2015	1.62
PruLink Asian Equity Fund	Equity Asia Pacific ex Japan	Higher Risk	Narrowly Focused	Asia	30/06/2015	1.55
AXA Shariah Global Equity Fund	Equity Global	Higher Risk	Broadly Diversified	N/A	30/06/2015	1.53
NTUC Global Equity Fund	Equity Global	Higher Risk	Broadly Diversified	N/A	30/06/2015	1.46
PruLink Singapore Growth Fund	Equity Singapore	Higher Risk	Narrowly Focused	Singapore	30/06/2015	1.46
NTUC Global Technology Fund	Equity Sector Information Tech	Higher Risk	Narrowly Focused	Technology	30/06/2015	1.31
UOB Life FOF International Growth Fund	Equity Global	Higher Risk	Broadly Diversified	N/A	31/12/2014	1.30
UOB LifeLink Global Fund	Equity Global	Higher Risk	Broadly Diversified	N/A	30/06/2015	1.28
UOB Life FOF Growth Fund	Equity Singapore	Higher Risk	Narrowly Focused	Singapore	31/12/2014	1.25
UOB LifeLink Growth Fund	Equity Singapore	Higher Risk	Narrowly Focused	Singapore	30/06/2015	1.21
NTUC AIM 2045	Target Maturity Other	Higher Risk	Broadly Diversified	N/A	30/06/2015	1.15
NTUC AIM 2035	Target Maturity Other	Higher Risk	Broadly Diversified	N/A	30/06/2015	1.14
NTUC Takaful Fund	Equity Global	Higher Risk	Broadly Diversified	N/A	30/06/2015	1.14
Aviva MM Capital Growth	Equity Asia Pacific ex Japan	Higher Risk	Narrowly Focused	Asia	30/06/2015	1.09
NTUC Singapore Equity Fund	Equity Singapore	Higher Risk	Narrowly Focused	Singapore	30/06/2015	0.73
Aviva Templeton Global Balanced (SP)	Mixed Asset SGD Balanced	Medium To High Risk	Broadly Diversified	N/A	30/06/2015	2.26
Aviva Balanced Growth (SP)	Mixed Asset SGD Balanced	Medium To High Risk	Narrowly Focused	Asia	30/06/2015	2.07
Aviva Income Growth (SP)	Mixed Asset SGD Conservative	Medium To High Risk	Narrowly Focused	Asia	30/06/2015	2.07



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Name (CPF)	Lipper Global	CPFIS Risk	CPF Focus	Detail	TER Date	Expense Ratio
John Hancock Global Balanced Fund	Mixed Asset SGD Balanced	Medium To High Risk	Broadly Diversified	N/A	30/06/2015	1.94
John Hancock Pacific Harvest Fund	Mixed Asset SGD Aggressive	Medium To High Risk	Narrowly Focused	Asia	30/06/2015	1.90
AIA Emerging Markets Balanced Fund	Mixed Asset SGD Balanced	Medium To High Risk	Narrowly Focused	Regional - Others	30/06/2015	1.75
AIA Greater China Balanced Fund	Mixed Asset SGD Balanced	Medium To High Risk	Narrowly Focused	Greater China	30/06/2015	1.75
AIA India Balanced Fund	Mixed Asset SGD Balanced	Medium To High Risk	Narrowly Focused	Country - Others	30/06/2015	1.75
AXA Global Balanced Fund	Mixed Asset SGD Balanced	Medium To High Risk	Broadly Diversified	N/A	30/06/2015	1.75
AXA Global Growth Fund	Mixed Asset SGD Aggressive	Medium To High Risk	Broadly Diversified	N/A	30/06/2015	1.75
AIA Global Balanced Fund	Mixed Asset SGD Balanced	Medium To High Risk	Broadly Diversified	N/A	30/06/2015	1.74
AIA Portfolio 70	Mixed Asset SGD Aggressive	Medium To High Risk	Broadly Diversified	N/A	30/06/2015	1.74
AXA Singapore Balanced Fund	Mixed Asset SGD Balanced	Medium To High Risk	Narrowly Focused	Singapore	30/06/2015	1.74
AIA Portfolio 50	Mixed Asset SGD Balanced	Medium To High Risk	Broadly Diversified	N/A	30/06/2015	1.73
AXA Asian Balanced Fund	Mixed Asset SGD Balanced	Medium To High Risk	Narrowly Focused	Asia	30/06/2015	1.71
John Hancock Adventurous Portfolio	Mixed Asset SGD Aggressive	Medium To High Risk	Broadly Diversified	N/A	30/06/2015	1.71
John Hancock Balanced Portfolio	Mixed Asset SGD Balanced	Medium To High Risk	Broadly Diversified	N/A	30/06/2015	1.70
Manulife Income Series - Global Balanced Fund	Mixed Asset USD Bal - Global	Medium To High Risk	Broadly Diversified	N/A	30/06/2015	1.70
AIA Japan Balanced Fund	Mixed Asset SGD Balanced	Medium To High Risk	Narrowly Focused	Country - Others	30/06/2015	1.67
HSBC Insurance Premium Balanced Fund	Mixed Asset SGD Balanced	Medium To High Risk	Broadly Diversified	N/A	30/06/2015	1.66
PruLink Asian Income and Growth Fund Acc	Mixed Asset SGD Balanced	Medium To High Risk	Narrowly Focused	Asia	30/06/2015	1.66
GreatLink Lion Asian Balanced Fund	Mixed Asset SGD Balanced	Medium To High Risk	Narrowly Focused	Asia	31/07/2015	1.65
PruLink Adapt 2025	Target Maturity Other	Medium To High Risk	Broadly Diversified	N/A	30/06/2015	1.65
Aviva Schroder Multi Asset Revolution	Mixed Asset SGD Balanced	Medium To High Risk	Broadly Diversified	N/A	30/06/2015	1.64
John Hancock Cautious Portfolio	Mixed Asset SGD Conservative	Medium To High Risk	Broadly Diversified	N/A	30/06/2015	1.61



THIRD QUARTER 2015 PERFORMANCE & RISK-MONITORING REPORT

Name (CPF)	Lipper Global	CPFIS Risk	CPF Focus	Detail	TER Date	Expense Ratio
Manulife Golden Global Balanced Fund	Mixed Asset SGD Balanced	Medium To High Risk	Broadly Diversified	N/A	30/06/2015	1.61
TMLS Global Balanced Fund	Mixed Asset SGD Balanced	Medium To High Risk	Broadly Diversified	N/A	30/06/2015	1.61
Manulife Income Series - Asian Balanced Fund	Mixed Asset SGD Balanced	Medium To High Risk	Narrowly Focused	Asia	30/06/2015	1.60
PruLink Global Managed Fund	Mixed Asset SGD Balanced	Medium To High Risk	Broadly Diversified	N/A	30/06/2015	1.58
GreatLink Lifestyle Balanced Portfolio	Mixed Asset SGD Balanced	Medium To High Risk	Broadly Diversified	N/A	31/07/2015	1.57
GreatLink Global Optimum Fund	Mixed Asset SGD Balanced	Medium To High Risk	Broadly Diversified	N/A	31/07/2015	1.56
GreatLink Global Supreme Fund	Mixed Asset SGD Balanced	Medium To High Risk	Broadly Diversified	N/A	31/07/2015	1.56
AIA Acorns of Asia Fund	Mixed Asset SGD Balanced	Medium To High Risk	Narrowly Focused	Asia	30/06/2015	1.52
Manulife Lifestyle Portfolios - Moderate	Mixed Asset SGD Balanced	Medium To High Risk	Broadly Diversified	N/A	30/06/2015	1.48
PruLink Asian American Managed Fund	Mixed Asset SGD Balanced	Medium To High Risk	Narrowly Focused	Asia	30/06/2015	1.48
PruLink Singapore ASEAN Managed Fund	Mixed Asset SGD Aggressive	Medium To High Risk	Narrowly Focused	Asia	30/06/2015	1.45
NTUC Asia Managed Fund	Mixed Asset SGD Aggressive	Medium To High Risk	Narrowly Focused	Asia	30/06/2015	1.43
Manulife Lifestyle Portfolios - Secure	Mixed Asset SGD Balanced	Medium To High Risk	Broadly Diversified	N/A	30/06/2015	1.41
Manulife Golden Balanced Growth Fund	Mixed Asset SGD Balanced	Medium To High Risk	Narrowly Focused	Singapore	30/06/2015	1.38
GreatLink Lifestyle Steady Portfolio	Mixed Asset SGD Balanced	Medium To High Risk	Broadly Diversified	N/A	31/07/2015	1.34
Manulife Lifestyle Portfolios - Conservative	Mixed Asset SGD Conservative	Medium To High Risk	Broadly Diversified	N/A	30/06/2015	1.32
PruLink Singapore Managed Fund	Mixed Asset SGD Aggressive	Medium To High Risk	Narrowly Focused	Singapore	30/06/2015	1.32
AIA Growth Fund	Mixed Asset SGD Aggressive	Medium To High Risk	Narrowly Focused	Singapore	30/06/2015	1.27
NTUC Global Managed Fund (Growth)	Mixed Asset SGD Aggressive	Medium To High Risk	Broadly Diversified	N/A	30/06/2015	1.21
NTUC AIM 2025	Target Maturity Other	Medium To High Risk	Broadly Diversified	N/A	30/06/2015	1.15
NTUC Global Managed Fund (Balanced)	Mixed Asset SGD Balanced	Medium To High Risk	Broadly Diversified	N/A	30/06/2015	1.14
GreatLink Lifestyle Secure Portfolio	Mixed Asset SGD Conservative	Medium To High Risk	Broadly Diversified	N/A	31/07/2015	1.08



## THIRD QUARTER 2015 PERFORMANCE & RISK-MONITORING REPORT

Name (CPF)	Lipper Global	CPFIS Risk	CPF Focus	Detail	TER Date	Expense Ratio
Aviva MM Balanced Growth	Mixed Asset SGD Balanced	Medium To High Risk	Narrowly Focused	Asia	30/06/2015	1.07
Aviva MM Income Growth	Mixed Asset SGD Conservative	Medium To High Risk	Narrowly Focused	Asia	30/06/2015	1.07
NTUC Global Managed Fund (Conservative)	Mixed Asset SGD Conservative	Medium To High Risk	Broadly Diversified	N/A	30/06/2015	1.04
NTUC Prime Fund	Mixed Asset SGD Balanced	Medium To High Risk	Narrowly Focused	Asia	30/06/2015	0.90
NTUC Singapore Managed Fund	Mixed Asset SGD Balanced	Medium To High Risk	Narrowly Focused	Singapore	30/06/2015	0.90
Aviva Legg Mason Western Asset Global Bond Trust (SP)	Bond Global	Low To Medium Risk	Broadly Diversified	N/A	30/06/2015	2.38
Aviva Nikko AM Shenton Short Term Bond (SP)	Bond Global	Low To Medium Risk	Broadly Diversified	N/A	30/06/2015	2.13
John Hancock Worldwide Bond Fund	Bond Global	Low To Medium Risk	Broadly Diversified	N/A	30/06/2015	1.41
AXA Global Secure Fund	Mixed Asset SGD Conservative	Low To Medium Risk	Broadly Diversified	N/A	30/06/2015	1.15
AXA Global Defensive Fund	Bond Global	Low To Medium Risk	Broadly Diversified	N/A	30/06/2015	1.14
AIA Portfolio 30	Mixed Asset SGD Conservative	Low To Medium Risk	Broadly Diversified	N/A	30/06/2015	1.12
AIA Global Bond Fund	Bond Other Hedged	Low To Medium Risk	Broadly Diversified	N/A	30/06/2015	1.12
AXA Singapore Bond Fund	Bond SGD	Low To Medium Risk	Narrowly Focused	Singapore	30/06/2015	1.08
NTUC AIM 2015	Target Maturity Other	Low To Medium Risk	Broadly Diversified	N/A	30/06/2015	1.07
Manulife Income Series - Asia Pacific Investment Grade Bond Fund	Bond Asia Pacific LC	Low To Medium Risk	Narrowly Focused	Asia	30/06/2015	1.06
HSBC Insurance Global Bond Fund	Bond Global	Low To Medium Risk	Broadly Diversified	N/A	30/06/2015	1.00
NTUC AIM NOW	Mixed Asset SGD Conservative	Low To Medium Risk	Broadly Diversified	N/A	30/06/2015	0.99
Manulife Singapore Bond Fund	Bond SGD	Low To Medium Risk	Narrowly Focused	Singapore	30/06/2015	0.97
NTUC Global Bond Fund	Bond Global	Low To Medium Risk	Broadly Diversified	N/A	30/06/2015	0.93
Manulife Golden International Bond Fund	Bond Global	Low To Medium Risk	Broadly Diversified	N/A	30/06/2015	0.91
GreatLink Global Bond Fund	Bond Global	Low To Medium Risk	Broadly Diversified	N/A	31/07/2015	0.90
AIA Regional Fixed Income Fund	Bond SGD	Low To Medium Risk	Narrowly Focused	Singapore	30/06/2015	0.86
PruLink Global Bond Fund	Bond Global	Low To Medium Risk	Broadly Diversified	N/A	30/06/2015	0.77
HSBC Insurance Singapore Bond Fund	Bond Global	Low To Medium Risk	Broadly Diversified	N/A	30/06/2015	0.72
TMLS Singapore Bond Fund	Bond SGD	Low To Medium Risk	Narrowly Focused	Country - Singapore	30/06/2015	0.70
GreatLink Short Duration Bond Fund	Bond Global	Low To Medium Risk	Narrowly Focused	Asia	31/07/2015	0.68
PruLink Singapore Dynamic Bond Fund	Bond SGD	Low To Medium Risk	Narrowly Focused	Singapore	30/06/2015	0.63
NTUC Singapore Bond Fund	Bond SGD	Low To Medium Risk	Narrowly Focused	Singapore	30/06/2015	0.55
TMLS Global Bond Fund	Bond Global	Low To Medium Risk	Broadly Diversified	N/A	30/06/2015	0.39
John Hancock Singapore Cash Fund	Money Market SGD	Lower Risk	Narrowly Focused	Singapore	30/06/2015	0.69
Manulife Singapore Cash Fund	Money Market SGD	Lower Risk	Narrowly Focused	Singapore	30/06/2015	0.68
AXA Singapore Dollar Fund	Money Market SGD	Lower Risk	Broadly Diversified	N/A	30/06/2015	0.43
GreatLink Cash Fund	Money Market SGD	Lower Risk	Broadly Diversified	N/A	31/07/2015	0.42
PruLink Singapore Cash Fund	Money Market SGD	Lower Risk	Broadly Diversified	N/A	30/06/2015	0.32
AIA S\$ Money Market Fund	Money Market SGD	Lower Risk	Narrowly Focused	Singapore	30/06/2015	0.30





Source: Central Provident Fund Board and Thomson Reuters Lipper

## Lipper Leader Rating Methodology

Unlike many competing quantitative measures, the strength of the Lipper Leader rating system is that it uses investor-centered criteria and not asset- or style/strategy-based criteria. These investor-centered criteria deliver clear, straightforward descriptions of a fund's success in meeting certain goals, such as preserving capital or building wealth through consistent, strong returns.

### Investor-centered measures of fund performance and suitability






The Lipper Leader rating system consists of four metrics that provide clear, straightforward descriptions of a fund's success in meeting certain goals for constructing individualized portfolios.

-  **Total Return**
-  **Consistent Return**
-  **Preservation**
-  **Expense**

### Determine whether you are investing in funds that fit your investment goals

Lipper Leaders provide context and perspective for making informed investment decisions but do not predict future performance. Funds are ranked against their Lipper peer group classifications each month for three-, five-, and ten-year periods and for the overall period. These ratings are based on an equal-weighted average of percentile ranks of the four Lipper Leader metrics.

For each metric:

-  The top 20% of funds receive a rating of "5" and are named **Lipper Leaders**.
-  The next 20% of funds receive a rating of "4."
-  The middle 20% of funds receive a rating of "3."
-  The next 20% of funds receive a rating of "2."
-  The lowest 20% of funds receive a rating of "1."



## Lipper Leader Metrics

### *Total Return*

The Lipper Leader rating for Total Return denotes a fund that has provided superior total return (income from dividends and interest as well as capital appreciation) compared to a group of similar funds. A Lipper Leader for Total Return may be the best fit for investors who want the best historical return, without looking at risk. This measure alone may not be suitable for investors who want to avoid downside risk. For more risk-averse investors the Total Return rating can be used with the Preservation and/or Consistent Return ratings to make an appropriate selection that balances risk and return.

### *Expense*

The Lipper Leader rating for Expense identifies a fund that has successfully managed to keep its expenses low relative to its peers and within its load structure. A Lipper Leader for Expense may be the best fit for investors who want to minimize their total costs. This measure can be used in conjunction with Total Return or Consistent Return to identify funds with above-average performance and lower-than-average cost.

### *Consistent Return*

The Lipper Leader rating for Consistent Return identifies a fund that has provided relatively superior consistency and risk-adjusted returns compared to a group of similar funds. Funds that achieve high ratings for Consistent Return may be the best fit for investors who value a fund's year-to-year consistency relative to other funds in a particular peer group.

Investors are cautioned that some peer groups are inherently more volatile than others, and even Lipper Leaders for Consistent Return in the most volatile groups may not be well suited to shorter-term goals or less risk-tolerant investors.

### *Preservation*

The Lipper Leader rating for Preservation is for a fund that has demonstrated a superior ability to preserve capital in a variety of markets compared with other funds in its asset class.

Choosing a Lipper Leader for Preservation may help to minimize downside risk relative to other fund choices in the same asset class. Investors are cautioned that equity funds have historically been more volatile than mixed-equity or fixed income funds, and that even a Lipper Leader for Preservation in more volatile asset classes may not be well suited to shorter-term goals or less risk-tolerant investors.



## 7.2 Investment Terminology Definitions

### Lipper Global Classification

The Lipper Global Classification (LGC) is the unique fund classification system developed by Lipper to assist fund information users in comparing fund performance within a reasonable peer group. Its purpose is to create homogeneous groups of funds with comparable investment objectives. We refine our existing classifications to ensure meaningful peer groups and add new classifications in response to client requests and market trends.

For more information please visit <http://www.lipperweb.com/Research/ClassMethodology.aspx>

### Quantitative Analysis

- **Return**

All returns are calculated on a NAV-to-NAV basis in Singapore dollars with dividends reinvested. The gain or loss of a particular fund in a particular period is calculated with the following formula:

#### Performance

$$\text{Percentage Growth} = \frac{\text{NAV}_t - \text{NAV}_{t-1}}{\text{NAV}_{t-1}}$$

For simple return:

$$\text{Performance Annualized} = (1 + \text{Percentage Growth})^{\frac{\text{Number of Time Units Per Year}}{\text{Number of Time Units in Period}}} - 1$$

For log returns:

- **Return Relative to Benchmark**

$$\text{Performance Annualized} = \frac{\text{Number of Time Units Per Year}}{\text{Number of Time Units in Period}} \times \text{Percentage Growth}$$

Relative return is a measure of fund performance relative to its benchmark's performance. It is calculated as the difference between the fund's return and the benchmark's return over a given period. Higher relative return means better fund performance relative to the benchmark's performance.

Formula:

$$\text{Relative Return} = \text{Fund Return} - \text{Benchmark Return}$$

For simple return:

$$\text{Relative Return Annualized} = (1 + \text{Relative Return})^{\frac{\text{Number of Time Units Per Year}}{\text{Number of Time Units in Period}}} - 1$$

For log returns:

$$\text{Relative Return Annualized} = \frac{\text{Number of Time Units Per Year}}{\text{Number of Time Units in Period}} \times \text{Relative Return}$$



▪ **Expense Ratio**

Expense ratio expresses the management, trustee, and certain other expenses of a managed fund as a proportion of the net asset value of the fund. The expense ratio expresses the sum of all operating expenses charged on an ongoing basis to the fund’s assets as a percentage of the fund’s average net asset value and is calculated using the following formula:

$$\text{Total Expense Ratio (\%)} = \frac{\text{Total Operating Expenses}}{\text{Average Net Asset Value}} \times 100$$

▪ **Information Ratio**

Information ratio is a risk-adjusted measure of a fund’s performance relative to its benchmark’s performance. (The fund’s benchmark can be found in the supplementary document Return Performance Review.) The information ratio is given by the ratio of average relative return (excess return) and tracking error. Tracking error or tracking risk refers to the volatility or standard deviation of the investment manager’s excess return over the benchmark’s return. A higher information ratio means better fund performance relative to the benchmark’s performance on a risk-adjusted basis.

Formula:

$$\text{Information Ratio} = \frac{\text{Average Relative Return}}{\text{Tracking Error}}$$

$$\text{Information Ratio Annualized} = \sqrt{\frac{\text{Number of Time Units Per Year}}{\text{Number of Time Units Per Sub Period}}} \times \text{Information Ratio}$$

▪ **Sharpe Ratio**

The Sharpe ratio is a risk-adjusted measure of performance developed by William F. Sharpe; it is also known as the reward-to-volatility ratio. It is calculated as the average subperiod excess return divided by the standard deviation of subperiod excess return over a given period. Subperiod excess return is the difference between the investment return and the CPFIS-OA guaranteed interest rate for a subperiod. A higher Sharpe ratio means better fund performance relative to the risk-free rate on a risk-adjusted basis. The Sharpe ratio is a special form of information ratio where the risk-free rate is the benchmark.

Formula:

$$\text{Sharpe Ratio} = \frac{\text{Average Sub Period Excess Return}}{\text{Standard Deviation of Sub Period Excess Returns}}$$

$$\text{Sharpe Ratio Annualized} = \sqrt{\frac{\text{Number of Time Units Per Year}}{\text{Number of Time Units Per Sub Period}}} \times \text{Sharpe Ratio}$$





▪ **Standard Deviation**

Standard deviation is a measure of investment risk or volatility in subperiod returns. It is calculated as the square root of variance, which is the average of the subperiod squared deviations over a given period. Higher standard deviation means higher risk.

Formula:

$$\text{Variance} = \frac{\sum (\text{Sub Period Returns} - \text{Average Return})^2}{\text{Number of Sub Periods} - 1}$$

$$\text{Standard Deviation} = \sqrt{\text{Variance}}$$

$$\text{Standard Deviation Annualized} = \sqrt{\frac{\text{Number of Time Units Per Year}}{\text{Number of Time Units Per Sub Period}}} \times \text{Standard Deviation}$$

▪ **Maximum Gain**

Maximum gain is the most positive monthly return over a given period.

Formula:

$$\text{Maximum Gain} = \text{Max (Positive Sub-Period Returns)}$$

▪ **Maximum Loss**

Maximum loss is the most negative monthly return over a given period.

Formula:

$$\text{Maximum Loss} = \text{Min (Negative Sub-Period Returns)}$$

▪ **Return/Risk**

The return/risk ratio is a measure of risk-adjusted performance. It is calculated as the average return divided by the standard deviation of subperiod returns over a given period. A higher return/risk ratio means better fund performance relative to fund volatility on a risk-adjusted basis.

Formula:

$$\text{Return to Risk} = \frac{\text{Average Return}}{\text{Standard Deviation}}$$

$$\text{Return to Risk Annualized} = \sqrt{\frac{\text{Number of Time Units Per Year}}{\text{Number of Time Units Per Sub Period}}} \times \text{Return to Risk}$$

