



**FEDERATION OF MALAYSIAN UNIT TRUST MANAGERS**  
( Company No. 272577 - P )

**INVESTMENT MANAGEMENT STANDARD**

<b>REFERENCE NO</b>	<b>: FMUTM/IMS(R&amp;D)-009</b>
<b>DATE ISSUED</b>	<b>: 27 FEBRUARY 2009</b>
<b>EFFECTIVE DATE</b>	<b>: 1 MAY 2009</b>

**MEASURING AND DISCLOSURE OF VOLATILITY FOR UNIT TRUST SCHEMES AND  
RECOGNIZED FUNDS**

**1.0 APPLICATION AND EFFECTIVE DATE**

- 1.1 This Investment Management Standard is made pursuant to Article 58 of the Memorandum of Association and shall come into force on 1 May 2009.
- 1.2 For existing advertisements and promotional materials, this Investment Management Standard must be complied with upon revision of the same immediately following the effective date.
- 1.3 This Investment Management Standard is issued as a best practice and the adoption of which is compulsory.

**2.0 BACKGROUND**

- 2.1 The Council has decided that as part of the industry's continuing efforts in educating the investors, Unit Trust Management Companies (UTMCs), Institutional Unit Trust Advisers (IUTAs) and Corporate Unit Trust Advisers (CUTAs) shall disclose the Volatility Factor of a unit trust scheme/ recognised funds and its relevant Volatility Class that could provide an indication to prospective investors on how volatile the returns of the particular unit trust scheme/ recognised fund fluctuated in the past.
- 2.2 The Council will endorse Fund Performance Rating Organisation (FPRO) to calculate return volatility for unit trust schemes/ recognised funds that will solely be based on quantitative measurement on return volatility and specifically exclude any qualitative factors.
- 2.3 The standard will be used by UTMCs, IUTAs and CUTAs in disclosing the Volatility Factor and its relevant Volatility Class in the advertisements and promotional materials of the unit trust schemes and recognised funds, where applicable.

**3.0 OBJECTIVE**

- 3.1 This Investment Management Standard aims to prescribe a standard format in measurement and disclosures of return volatility for funds in order to provide investors with, at the first instance, information regarding volatility characteristics of unit trust schemes and recognised funds.

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- 4.1 For purposes of this Investment Management Standard and any interpretation thereof, the term “Volatility Factor” is a number calculated based on methodology endorsed and prescribed herein by the FMUTM and disclosed by the UTMCS, IUTAs or CUTAs relating to the sensitivity of the portfolio return of a unit trust scheme/ recognised fund to changes in market conditions and the general economy, and is based on an evaluation of a specific set of quantitative factors involving the performance of a unit trust scheme/ recognised fund.
- 4.2 In view of the above, the Volatility Factor is developed by FPRO based on the following requirements or conditions specifically prescribed by the FMUTM Council:
- a) The methodology is solely based on quantitative measurement on return volatility. Other qualitative factors such as portfolio concentration, investment style, peer group comparison based on sector/ asset classes and skills of fund managers are specifically excluded;
  - b) Only unit trust schemes/ recognised funds launched for at least 36 months are required to disclose the Volatility Factor and its relevant Volatility Class;
  - c) The Volatility Factor and relevant Volatility Class for respective unit trust schemes/ recognised funds under management will be calculated/ assigned by FPRO. UTMCS/ IUTAs/ CUTAs will subsequently published the Volatility Factor and Volatility Class in the relevant advertisements and promotional materials; and
  - d) The Investment Management Standard will cover only unit trust schemes/ recognised funds as described in Section 7.0.
- 4.3 Notwithstanding the above, this Investment Management Standard for measuring and disclosure of Volatility Factor and its Volatility Class are not intended:
- a) as substitutes for due diligence and know-your-client best practice procedures currently put in place by UTMCS, IUTAs, CUTAs and Unit Trust Consultants (UTCs). Those best practices must continue to be applied in order to understand, among others, the clients’ financial needs and risk profile and assessing the suitability of each investment before recommending to the clients.
  - b) to be used as a comprehensive measure in determining consistency in return performance of unit trust schemes/ recognised funds. If in doubt, investors should consult their professional advisers.

**5.0 MEASURING FUND VOLATILITY FACTOR**

- 5.1 Volatility Factor is the annualised standard deviation on unit trust schemes/ recognised funds month-end returns for the immediate preceding 36 months and will be used as the main measurement for volatility under this Investment Management Standard.
- 5.2 Standard deviation is a measure of the dispersion of a set of data from its mean. While it is recognized that any single measure has limitation, standard deviation is to be used as the measurement for unit trust scheme/ recognised fund volatility as it is unambiguous and relatively well-established and understood measurement of risk. Also, standard deviation captures both upside and downside volatility risks and is a common method used in measuring total return volatility.

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## 5.3 Formula:

$$\text{Standard deviation} = \sqrt{A}$$

where:

$$A = \frac{\sum_{i=1}^N (X_i - \mu)^2}{N-1}$$

$X_i$  = month-end total return for the *ith* month

$N$  = number of month-end total returns in the period

$\mu$  = the mean of the month-end total returns for the period

Annualised standard deviation =  $\sqrt{\text{number of time period per year} \times \text{standard deviation}}$ .

5.4 Total returns after adjusted for income distributions and/ or unit-splits are used for the above calculation.

5.5 The Volatility Factor will be updated by the FPRO once a month and made available to FMUTM for further dissemination to UTMCS, IUTAs and CUTAs.

**6.0 DETERMINATION OF VOLATILITY CLASSES**

6.1 The Volatility Classes are developed by ranking all qualified unit trust schemes/ recognised funds by their Volatility Factor in an ascending order, which is then evenly divided into five Volatility Classes as follows:

- a) Very Low
- b) Low
- c) Moderate
- d) High
- e) Very High

6.2 Thus, 20% of all qualified unit trust schemes/ recognised funds with the lowest Volatility Factor will be assigned “Very Low” as Volatility Class, the next 20% received a score of “Low”, the middle 20% are classified as “Moderate”, the next 20% are assigned “High” and the highest are classified as “Very High”.

6.3 The volatility bandings that separate each Volatility Class is however dynamic and it involves identifying middle value of the adjacent Volatility Factors in different Volatility Class. For example, as of 31 December 200X the volatility bandings for the respective Volatility Classes are as follows:

<b>Volatility Class</b>	<b>Volatility Banding</b>
Very Low	$0.000 \leq \text{Volatility Factor} \leq 3.939$
Low	$3.939 < \text{Volatility Factor} \leq 9.869$
Moderate	$9.869 < \text{Volatility Factor} \leq 12.678$
High	$12.678 < \text{Volatility Factor} \leq 14.638$
Very High	Volatility Factor more than 14.638

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- 6.4 Volatility Classes for respective unit trust schemes/ recognised funds will be updated by FPRO once every six months. The revised Volatility Classes will be made available to FMUTM, together with Volatility Factor of the respective schemes in the form of Malaysian Fund Volatility Report - FPRO.
- 6.5 Based on the above Malaysian Fund Volatility Report published by FPRO, UTMCS, IUTAs and CUTAs shall disclose the appropriate fund Volatility Factor, Volatility Classes in manner prescribed in Section 10.

**7.0 APPLICABILITY**

- 7.1 This Investment Management Standard would apply to existing unit trust schemes/ recognised funds as well as all recognised funds as prescribed under the Guidelines for the Offering, Marketing and Distribution of Foreign Funds issued by the Securities Commission (hereafter collectively referred to as “Schemes”) that have been in operation for at least 36-month period, be it in Malaysia or other jurisdictions.
- 7.2 For avoidance of doubt, this Investment Management Standard would not apply to the following Schemes:
- a) Real Estate Investment Trusts;
  - b) Exchange Traded Funds;
  - c) Wholesale funds;
  - d) Funds that are closed for new investments; and
  - e) Schemes that have obtained specific written exemption from the FMUTM.
- 7.3 For the purpose of this Investment Management Standard, the disclosure requirements applies to all notices dedicated to present investors with essential details that help them make investment decisions as specified under Clauses 1.04 and 1.05 of the Guidelines on Unit Trust Advertisements and Promotional Materials issued by the Securities Commission with the exceptions provided in Clause 7.4 of this Investment Management Standard.
- 7.4 The provisions as specified in Clause 7.3 shall not apply to the following:
- a) notices published through sound broadcasting, film or televisions; or
  - b) notices that do not include investment performance figures for the Scheme.
- 7.5 Any exemption or variation from this Investment Management Standard should not absolve the UTMCS, IUTAs and CUTAs from any other requirements as set out under any written law.

**8.0 GENERAL DISCLOSURES OF FUND VOLATILITY FACTOR AND ITS RELEVANT VOLATILITY CLASS**

- 8.1 The requirements as stipulated are in addition to all requirements imposed on UTMCS, IUTAs and CUTAs under the law. The contents of this Investment Management Standard do not intend to derogate from any such legal provisions.

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8.2 In addition to this Investment Management Standard, UTMCS, IUTAs and CUTAs are also expected to be guided by the spirit as well as the content of the requirements as set out in the Guidelines on Unit Trust Advertisements and Promotional Materials issued by the Securities Commission, while preparing and issuing promotional materials.

**9.0 SPECIFIC DISCLOSURES OF FUND VOLATILITY FACTOR AND ITS RELEVANT VOLATILITY CLASS**

9.1 Advertisements and promotional materials of a Scheme shall include the following:

- a) The Volatility Factor and its relevant Volatility Class; and
- b) A Disclosure Statement containing all the information (as described in Clause 9.3 below) that are relevant to an investor's understanding of the Volatility Factor and its relevant Volatility Class.

9.2 The Volatility Factor and its relevant Volatility Class should include cross-referencing to the section of the body of the advertisements and promotional materials that contains the Disclosure Statement.

9.3 As a minimum requirement, the following disclosures shall be provided in the Disclosure Statement:

- a) the most current Volatility Factor, its Volatility Class, relevant volatility bandings and the applicable date.
- b) a description of the Volatility Factor and its relevant Volatility Class in narrative form, containing the following disclosures:
  - i. a statement that the Volatility Factor and Volatility Class are subject to change monthly/ once in six monthly.
  - ii. a statement that not all, but Schemes that were launched in the market for at least 36 months will have the Volatility Factor and its relevant Volatility Class;
  - iii. a description of the types of risks the volatility measures (e.g., short-term volatility);
  - iv. a statement that the portfolio may have changed since the date of the Volatility Factor and its relevant Volatility Class are obtained; and
  - v. a statement that there is no guarantee that the Scheme will continue to have the same Volatility Factor and its relevant Volatility Class in the future.

9.4 Sample Disclosure Statement:

“Based on the fund's portfolio returns as at [date ], the Volatility Factor (VF) for this fund is [Volatility Factor] and is classified as [Volatility Class] (source: name of FPRO). [Volatility Class] includes funds with VF that are above [insert lower volatility banding] but not more than [insert higher volatility banding]. The VF means there is a possibility for the fund in generating an upside return or downside return around this VF. The Volatility Class (VC) is assigned by [name of FPRO] based on quintile ranks of VF for qualified funds. VF is subject to monthly revision and VC will be revised every six months. The fund's portfolio may have changed since this date and there is no guarantee that the fund will continue to have the same VF or VC in the future. Presently, only funds launched in the market for at least 36 months will display the VF and its VC.”

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- 9.5 The advertisements and promotional materials must incorporate the Volatility Factor and Volatility Class that are most recently available and no more than six months old. For example, as at 31 January 2009, the promotional materials should not contain Volatility Factor covering periods which end before 31 July 2008. This is intended to ensure that stale Volatility Factors and its relevant Volatility Classes are not provided to investors.
- 9.6 Involvement of FMUTM and FPRO should only be stated in a factual manner and not give investors the impression that their investments are safe/secure. In particular, the advertisements and promotional materials should not imply that the FMUTM or FPRO have taken responsibility for the financial soundness of the Schemes or of the UTMC, or that the FMUTM or FPRO recommend the Schemes, or that statements and opinions expressed are true/accurate.

**10.0 USAGE GUIDE FOR FUND VOLATILITY ICON**

- 10.1 It is important that the Volatility Factor and its relevant Volatility Class are used correctly to ensure the readability and usability across various usages and promotional materials.
- 10.2 Information inside the icon and format
- a) The icon consists of a fixed symbol and custom/ variable number of actual value of the Fund Volatility Factor and Fund Volatility Class as follows:

**Figure 1: Volatility Factor and Volatility Class Icon**

- b) Colour of the Icon  
All black on a medium to light background or all white on a dark background.
- c) Number format for Volatility Factor and Volatility Class:
- Font type: Arial Black
  - Font size: The Volatility Factor and its relevant Volatility Class must be legible and appear in proportionate type sizes as illustrated in the Icon.
  - Number of decimal places: One.
- 10.3 Size  
The size of the icon is standardized to 1.5 cm in diameter.
- 10.4 Location
- a) The icon (described in Section 10.2 above) is to be disclosed at the top right hand corner of the cover/ first page/ first section of the material;
- b) Should the advertisements and/ or promotional materials consist of returns of more than one Schemes, the icons or Volatility Factor and Volatility Class for the respective Schemes can be placed in / or next to the table of returns.

**MEASURING AND DISCLOSURE OF VOLATILITY FOR UNIT TRUST SCHEMES AND RECOGNIZED FUNDS****10.5 Others**

Kindly provide reasonable amount of space around the entire icon. This area, referred to as the area of isolation, must remain clear of other graphic imagery, edges, folds and other visual elements.

10.6 A copy of the mock-up fund fact sheet is enclosed as Appendix 1 for reference purposes.

**11.0 EVALUATION PERIOD**

11.1 This Investment Management Standard will be reviewed and evaluated after a 12-month period from the Effective Date to consider whether:

- a) the Volatility Factors and its relevant Volatility Classes have achieved its purpose of alerting investors at the initial stage;
- b) the Investment Management Standard has reduced the dissemination of inappropriate or misleading information by UTMCS, IUTAs, CUTAs and UTCs;
- c) the Investment Management Standard should apply to all Schemes; and
- d) additional standards or guidance are needed to prevent investors' confusion or minimize excessive variability among measurement of similar portfolios.

11.2 At the conclusion of its evaluation, FMUTM will determine the need to modify the methodology and procedures to fulfil the stated objectives.

**12.0 SYSTEMS AND CONTROLS**

12.1 Full accountability for the accuracy, reliability and completeness of the Volatility Factor and its relevant Volatility Class as well as the disclosures remain with the UTMCS, IUTAs and CUTAs who is a party to the preparation of the materials or any relevant portion thereof. Hence, UTMCS/ IUTAs/ CUTAs should exercise due diligence in ensuring that all the requirements of the FMUTM pertaining to this Investment Management Standard are met.

12.2 There shall be well defined policies and procedures, controls as well as proper records in place to ensure that the minimum disclosure requirements of this Investment Management Standard are met.

12.3 An original copy of the relevant advertisements and promotional materials with relevant disclosures may be required by the FMUTM during annual compliance assessment.

12.4 All pertinent records should be maintained and made available for checking and audit verification purposes.

# DEF FUND MANAGEMENT

## Appendix 1 (Mock-Up for Fund Fact Sheet)

Fund Fact Sheet | 30 June 2008

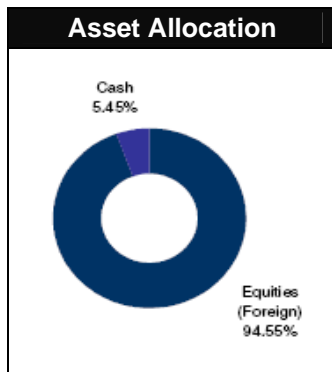
### Manager's Comments

The Fund depreciated by 8.2%, underperforming its index by 11bp. Contribution to underperformance came from Financials while overweight in Information Technology compensated partially for the underperformance.

YTD the Fund is down 19.5% with underperformance of 5.2%. Although, the worst effects of the credit crunch are behind us, the continued re-capitalizations of the US financial institutions from sub-prime provisions, may lead to earnings dilution and poor market performance. In Asia, growth is slowing even as exports to the US slow down. But growth should remain positive. Regional valuations have fallen below 5-year averages in many countries. Still, markets will only recover when the US market stabilizes.

The Fund remains underweight Japan (22.0%), and overweight S Korea (17.5%) and Philippines (9.0%). Financials (35.0%) and Information Technology (14.6%) are the largest weighted sectors.

The Fund decreased by 8.16% in June 2008 and the benchmark index decreased by 8.05% over the month.



#### Sector

Construction	4.69%
Consumer Products	5.10%
Finance	27.10%
Industrial Products	27.91%
Plantations	0.33%
Properties	9.78%
Trading Services	19.64%
Cash	5.45%
<b>Total</b>	<b>100.00%</b>

#### Yearly Returns (%)

Year	Fund	Benchmark
2007	11.36	5.25

#### Risk Statistics

Beta	N/A
Standard Deviation	N/A
Information Ratio	N/A
Sharpe Ratio	N/A

3 year monthly data

#### Country Allocation and Investment Holdings

Country Allocation		10 Largest Holdings	
Japan	21.87%	Singapore Telecom Ltd Ord	Singapore 2.10%
Korea	16.53%	Macquarie Korea Infra Fund Krw0	South Korea 2.03%
Thailand	8.87%	Samsung Electronics	South Korea 1.99%
Taiwan	8.77%	Konica Minolta Holdings Inc	Japan 1.98%
Philippines	7.99%	Glow Energy Pcl-Foreign	Thailand 1.82%
Singapore	7.81%	Fujifilm Holdings Corp	Japan 1.72%
China	4.48%	Capitacommercial Trust	Singapore 1.70%
Australia	4.12%	Sompo Japan Insurance Inc	Japan 1.69%
Bermuda	4.03%	Taiwan Semiconductor M Ord	Taiwan 1.67%
Hong Kong	3.95%	Mitsubishi Ufj Financial Gro Npv	Japan 1.67%

# GHI GROWTH FUND



The investment objective is to seek capital growth by investing primarily in equities and equity related instruments in the Asian Region (excluding Malaysia).

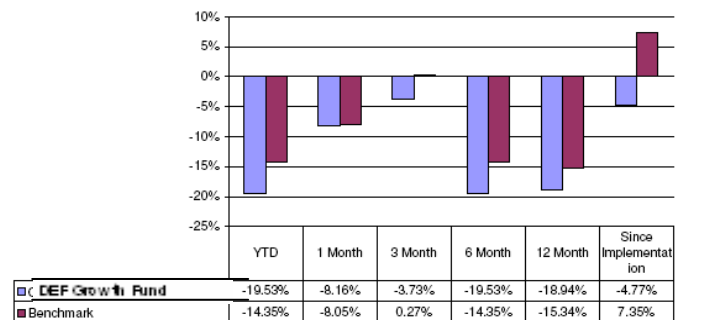
### Fund is Suitable for Investors Who

- have a long term investment horizon;
- want a well diversified portfolio of Asian region equities;
- can accept that investment returns may fluctuate significantly over the short term and may even be negative; and/or
- are willing to take higher risks in anticipation for potentially higher capital appreciation over the long term.

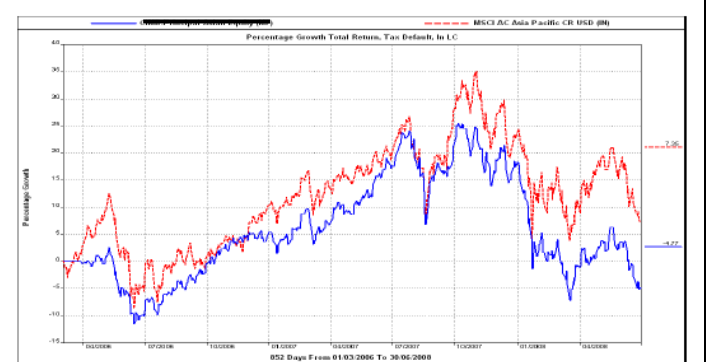
### Fund Details

Fund size (30 June 2008) RM399.8 million  
 Unit NAV (30 June 2008) RM1.0383  
 Fund Currency Ringgit Malaysia  
 Fund Launch 1 March 2004  
 Fund Inception 1 March 2004  
 Domicile Malaysia  
 Application Fee Up to 6.50% of NAV per unit  
 Management Fee 1.85 % per annum  
 Trustee Fee 0.035% per annum (excluding foreign custodian fee) (min RM18,000 per annum)  
 Dealing Daily (as per Bursa Malaysia trading day)  
 Investment Manager DEF Fund Management Berhad  
 ISIN Code MYU200Z009  
 Bloomberg Code DEFGF MK

### Performance Record



### NAV to NAV (2)



(1) Based on the fund's portfolio returns as at 30 June 2008, the Volatility Factor (VF) for this fund is 18.1 and is classified as "Very High". (source: Lipper) "Very High" includes funds with VF that are above 14.6 (source: Lipper). The VF means there is a possibility for the fund in generating an upside return or downside return around this VF. The Volatility Class (VC) is assigned by Lipper based on quintile ranks of VF for qualified funds. VF is subject to monthly revision and VC will be revised every six months. The fund's portfolio may have changed since this date and there is no guarantee that the fund will continue to have the same VF or VC in the future. Presently, only funds launched in the market for at least 36 months will display the VF and its VC.

(2) March 2006 to June 2008, Performance data represents the combined income & capital return as a result of holding units in the fund for the specified length of time, based on bid to bid prices. Earnings are assumed to be reinvested. Source: Lipper.

We recommend that you read and understand the contents of DEF Fund Management Berhad's Master Prospectus Issue No. 12 dated 30 June 2008 which has been duly registered with the Securities Commission before investing and that you keep the said prospectus for your records. Any issue of units to which the Prospectus relates will only be made upon receipt of the completed application form referred to in and accompanying the Prospectus, subject to the terms and conditions therein. Investments in the Fund are exposed to stock specific risk, company specific risk, country risk, currency risk, risk of assets in emerging markets and liquidity risk. You can obtain copies of the Prospectus from any of our offices. There are fees and charges involved in investing in the funds. We suggest that you consider these charges carefully prior to making an investment. Unit prices and income distributions, if any, may fall or rise. Past performance is not reflective of future performance and income distributions are not guaranteed, you are also advised to read and understand the contents of the Unit Trust Loan Financing Risk Disclosure Statement before deciding to borrow to purchase units.