CONSULTATION PAPER

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Amendments to the Code on Collective Investment Schemes

Monetary Authority of Singapore

CONSULTATION PAPER ON AMENDMENTS TO THE CODE ON COLLECTIVE INVESTMENT SCHEMES

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PREFACE

The Code on Collective Investment Schemes (the "**Code**") is issued pursuant to section 321 of the Securities and Futures Act (Cap. 289) to set out best practices in the management, operation and marketing of collective investment schemes ("**CIS**").

2 Since the issuance of the Code in May 2002, MAS has made various amendments in 2002, 2005 and 2006 in response to feedback from the fund management industry and to cater to developments such as real estate investment trusts. From time to time, where justified by the circumstances of the case, MAS has also granted waivers or exemptions from certain limits prescribed in the Code. With the increased pace of product development in recent years, it is now timely to undertake a comprehensive review of the Code. The current review aims to ensure that the regulatory regime for CIS, in particular the investment guidelines, keeps pace with product innovation and industry developments, as well as address specific issues that have been brought to MAS' attention. In conducting the review, MAS took into account the rules and regulatory developments in major fund jurisdictions such as Luxembourg, Ireland, the United Kingdom and Hong Kong, as well as the United States of America.

3 In developing the proposals encapsulated in this consultation paper, we have sought to balance the need to keep pace with international developments in fund management with that of ensuring that the guidelines continue to afford retail investors confidence in the regulatory framework for Singapore retail funds. With the proposed amendments, it is envisaged that case-by-case waivers or exemptions would normally not be required and would not be granted in the future.

4 The proposed amendments will also apply to funds offered via an investment-linked life insurance policy ("ILP"). As a transitional measure, MAS proposes to give fund managers and approved trustees for CIS three months to comply with the revised Code. Taken together, MAS considers that the proposed amendments will provide clarity and increase the flexibility for managers in managing their funds, and enhance protection for investors.

Summary of Key Changes

Chapter	Proposals
Chapter I: Non-specialised Funds	*Unlisted Securities* The Code currently specifies an investment limit of 10% of deposited property applying to unlisted securities, including over-the-counter ("**OTC**") financial derivatives. To better achieve the policy intent of assuring funds of *inter alia*, liquidity and verifiable valuation, so that they are suitable for retail investors, we propose to introduce a list of permissible investments which fulfill certain criteria. The list will not be confined to listed securities. Unlisted securities, such as

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	financial derivatives that meet specified criteria will also be included. As investments in unlisted shares will not meet the proposed criteria, such investments will continue to be subject to a limit of 10% of a fund's net asset value. *Concentration in Exposures to a Single Entity or Group* Currently, the Code states that the calculation of the single issuer and single group limits of 10% and 20% of deposited property should take into account investments in securities issued by and deposits placed with the same issuer, to mitigate concentration risk. Exposure to the underlying investment of a financial derivative has to be included in the calculation of the single issuer and group limits. In practice, exposures to money market instruments and counterparty risks arising from OTC financial derivative transactions have also been included within the single issuer and group limits. For the avoidance of doubt, we will spell out explicitly the various exposures that should be taken into account for the purposes of the single entity and group limits. Specifically, we propose to limit a scheme's exposure to a single entity through investments in transferable securities of that entity to 10% of the net asset value of the scheme. Aggregate exposures via transferable securities, money market instruments, deposits, OTC financial derivative transactions, repurchase arrangements or securities lending agreements with a single group of entities will be limited to 20% of a scheme's net asset value. We will retain the current allowance for funds tracking a benchmark to invest in securities of the benchmark up to 2% more than the benchmark weight. In addition, to provide for situations where a constituent of the scheme's benchmark is (or is part of a group which includes) an institution with which the scheme has placed deposits, the aggregate exposures to the group may be up to the constituent's benchmark weight plus 2%, plus the amount of deposits placed. Finally, we propose to set an overall cap of 25% to the group limit where the scheme invests in constituents of its benchmark. *Single Issue of Securities* To assure liquidity of underlying investments, the Code currently restricts schemes from holding more than 10% of any single issue of securities. While retaining this rule, we will make clear how the 10% limit applies to shares (as a percentage of total outstanding shares) and debt (as a percentage of each

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	individual issuance), and introduce specific rules for investments into tranches of medium term notes (20% per tranche and 10% overall limit on the programme). *Credit Ratings* Besides setting out the actions that a manager should take in the event of ratings being downgraded, we propose that the manager should use the lowest rating where multiple credit ratings exist. We also propose to impose a tighter single entity limit of 5% for unrated or non-investment grade corporate bonds. *Use of Financial Derivatives* To mitigate risks arising from the use of financial derivatives, we propose to set cover rules, liquidity rules, valuation rules and counterparty limits. Currently, a fund’s exposure to financial derivatives is limited to 100% of its deposited property, and exposure is calculated using the commitment approach as the default method. Other methods for calculating exposure may be allowed subject to MAS’ consent. MAS will continue to require the commitment approach to be the default method of calculating exposures to financial derivatives. For alternative methods, the proposed amendments will provide specific guidelines for the use of Value-at-Risk (“**VAR**”). Managers who wish to use calculation methods other than the commitment approach, would be required to submit specific information on their risk management process to MAS for consideration. Currently, only futures and option funds are permitted to invest in commodities and their derivatives under the Futures & Options Fund appendix. Non-specialised schemes are not allowed to do so. We propose to permit non-specialised schemes to invest in financial derivatives on commodities provided that the transactions are cash settled and appropriately diversified across different types of commodities. (Investments in physical commodities including gold will not be permitted.) In view of the foregoing proposal, as well as the proposed list of permissible investments described in the *Unlisted Securities* section above, there is no longer a need for the Futures and Options Fund appendix. We thus propose to remove the appendix. Similarly, we propose to remove the currency funds appendix as non-specialised schemes will be allowed to invest in

Chapter	Proposals
	currency derivatives. *Counterparty Risks* We propose to require the counterparty to an OTC derivative transaction to be subject to prudential supervision by a financial supervisory authority in its home jurisdiction. The counterparty exposure will be limited to 10% of the fund's net asset value for an individual eligible financial institution (i.e. with a minimum credit rating of A), and for other counterparties, 5% of the net asset value. (These limits will be within the single entity limit and group limit described above.) In calculating the counterparty exposure, the replacement cost and the potential future credit risk should be taken into account. The fund may reduce its counterparty exposures through collateral which meet certain requirements such as marked-to-market on a daily basis, exposed to negligible risks (e.g. government bonds of AAA credit rating or cash) and held by a third party custodian. Finally, we will also propose the circumstances under which the netting of exposures with the counterparty is allowed. *Securities Lending* We propose to enhance the existing safeguards for securities lending by specifying the type of acceptable collateral, the eligibility criteria for custodians, and the types of assets that a scheme may invest in with cash collateral. With these enhanced safeguards, we propose to remove the current limit of 50% of deposited property of the scheme for securities lending. *Naming of Funds* We propose to set principles on the choice of fund names. Fund names should be clear and not misleading. The fund name is to reflect, when applicable, its: geographical focus, asset type and sector focus.
Chapter II: Structured Product Funds	Currently, the Code allows the unlisted securities limit and the single issuer and group limits to be increased to one-third of the deposited property of the scheme to accommodate structured product funds. In light of the proposal to exclude OTC derivatives from the unlisted securities limit, and the heightened attention on credit risk as a result of the recent financial crisis, we are of the view that the exceptions are no longer desirable. That is, structured product funds should comply with the rules applicable to other non-specialised funds.

Chapter	Proposals
Chapter III: Index Funds	We propose to introduce a new appendix setting out the requirements for schemes seeking to track indices. An acceptable index should be sufficiently diversified, be 'investable', have a clearly defined objective and reflect the characteristics of the market or sector it aims to represent. Information on the index should also be published in an appropriate manner. We would also like to seek views on whether hedge fund indices should be excluded from the list of acceptable indices.
Chapter IV: Money Market Funds	*Credit Ratings* We propose to amend the money market fund guidelines to clarify the treatment for cases where multiple credit ratings exist. We also intend to expand the short term ratings to include ratings from Moody's Investors Services. *Portfolio Maturities* We propose that money market funds maintain a dollar-weighted average portfolio maturity limit of not more than 120 calendar days.
Chapter V: Hedge Funds	We propose to clarify that hedge funds, like other schemes, are prohibited from short selling of securities, whether or not backed by securities borrowing.
Chapter VI: Capital Guaranteed Funds	The current requirements are for an eligible guarantor to have, in the case of a financial institution, an individual rating of at least B by Fitch Inc, a financial strength rating of at least B by Moody's or a long term issuer credit rating of at least AA by Standard & Poor's. We instead propose to use the long term rating as the common yardstick to determine the eligibility to act as a guarantor. The criteria will be a minimum long term credit rating of Aa by Moody's, AA by Standard and Poor's or AA by Fitch Inc.
Chapter VII: Fund of Funds	We propose that a fund-of-funds or a multi-manager fund should include the term "fund-of-funds" or "multi-manager" in its name but need not reflect the scheme's investment geographical focus, asset type and the sector focus.

Chapter	Proposals
Chapter VIII: Operational Requirements	*Sending of Accounts and Reports* With increased computer literacy and internet accessibility, we propose to allow trustees to send, or cause to be sent, the accounts and reports to unitholders by electronic means. Hard copies should still be sent to unitholders who request for them. And in consideration that certain unitholders who are in the older age group might not be computer literate, we propose that trustees should send hardcopies of the accounts and reports to those who are age 55 years and above as at a specified date. However, this group of unitholders can still opt for softcopies of the accounts and reports. *Transactions with Related Parties* Currently, the manager of a scheme which is benchmarked against a widely accepted index constructed by an independent party and approved by MAS is allowed to invest in its own securities or those of its related companies up to the benchmark weight. We propose to allow an additional absolute overweight allowance of two percentage points to allow managers to avail themselves of investment opportunities they have a strong conviction in. *Valuation Errors* We intend to standardise the information submitted to the Authority when valuation errors arise.
Chapter IX: Miscellaneous	*Performance Fees* We propose to introduce guidelines to standardise the methods used for calculating performance fees where the fund manager decides to impose such fees. In the event that performance fees are payable to the manager, either the fulcrum fee or high water mark method should be used. *Definition of 'Liquid'* We would like to seek your views on the proposed definition for 'liquid' in respect of transferable securities and financial derivatives. *Back-testing and Simulated Performance Data* We would like to seek your views on whether the use of back-testing and simulated performance figures should be allowed; and if so, the circumstances when these should be allowed and the conditions that should be observed.

Request for Comments

5 The Authority invites interested parties to give their views and comments on the proposals set out in this consultation paper. Comments may be submitted to:

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Capital Markets Department
Monetary Authority of Singapore
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The Authority requests that all comments and feedback to be submitted by 25 June 2010.

6 Please note that all submissions received may be made public unless confidentiality is specifically requested for the whole or part of the submission.

I. NON-SPECIALISED FUNDS

1.1 Diversification Limits

a) Unlisted Securities

Background

1.1.1 The Code currently prescribes that investments in unlisted securities including unlisted derivatives should not exceed 10% of the deposited property of the scheme. This 10% limit does not apply to shares offered through an initial public offering which has been approved for listing and unlisted debt securities that are traded on an organised over-the-counter market which is of good repute and open to the public. Up to an additional 10% of the deposited property of the scheme may be invested in unlisted debt securities which are of investment grade but for which there is no ready secondary market. Exceptions to the 10% unlisted securities rule are also allowed for investments in structured products subject to certain criteria.

1.1.2 The intent of the guidelines on unlisted securities is to ensure that the scheme holds liquid instruments such that the scheme is able to meet redemptions, as and when they are due. Correspondingly, the scheme should invest in securities that are subject to reliable and verifiable valuation on a daily basis, and can be liquidated in a timely and efficient manner at fair value.

1.1.3 In recent years, fund managers have increasingly used financial derivatives, including those that are traded over-the-counter ("**OTC**"), in the management of retail funds. Financial derivatives are used for hedging risks and managing the portfolio more efficiently. Financial derivatives such as options, warrants, forwards and swaps are also used to optimise and increase portfolio returns.

1.1.4 The Authority notes that OTC financial derivatives are deemed to be eligible assets for funds regulated in Luxembourg, Ireland and the United Kingdom. In Hong Kong, funds may invest in financial derivatives such as warrants, options and futures subject to prescribed limits. In other words, OTC financial derivatives are not subject to a 10% limit in these jurisdictions.

Proposals

1.1.5 The Authority is of the view that the policy intent underlying the unlisted securities limit and the rules on the use of financial derivatives is better implemented through prescribing a list of permissible investments which fulfill certain criteria to assure their suitability for retail funds. This list will not be confined to listed securities but will include OTC financial derivatives which meet the specified criteria. Unlisted shares, which will not meet the specified criteria, will continue to be subject to a limit of 10% of a fund's net asset value. The proposed formulation of the list of permissible investments is as follows:

1 Permissible Investments

1.1 The scheme may not invest in any asset other than the following:

a) transferable securities meeting the requirements of paragraph 1.3;

b) money-market instruments including repurchase agreements;

c) eligible deposits;

d) units in other schemes;

e) financial derivatives meeting the requirements of paragraph 1.4;

f) shares or securities equivalent to shares that are not listed for quotation and have not been approved for listing for quotation on a securities exchange, subject to a limit of 10% of a scheme's net asset value.

1.2 For the purpose of paragraph 1.1,

a) "deposits" has the same meaning as in section 4B(4) of the Banking Act (Cap. 19) and "eligible deposits" refer to deposits with banks licensed under the Banking Act (Cap 19), finance companies licensed under the Finance Companies Act (Cap. 108), merchant banks approved as financial institutions under section 28 of the Monetary Authority of Singapore Act (Cap. 186) or any other deposit-taking institution licensed under an equivalent law in a foreign jurisdiction.

b) "transferable securities" means:

(i) shares or securities equivalent to shares; or

(ii) bonds and other debt instruments,

but does not include any security the title to which cannot be transferred or can be transferred only with the consent of a third party.

c) the acquisition of any permissible investment should be consistent with the investment objective and the investment approach of the scheme.

Guidance:

For the purpose of paragraph 1.1(d), where the scheme invests in schemes constituted outside Singapore, the manager should satisfy the Authority that these investments are primarily in schemes which meet the following criteria:

- *The foreign scheme is constituted and regulated in a jurisdiction which has laws and practices which affords to participants in Singapore protection at least* *equivalent to that afforded to participants of schemes which are constituted and wholly managed in Singapore;*

- *The foreign scheme is registered in a jurisdiction where the core investment and borrowing requirements for non-specialised or specialised schemes as the case may be are substantially the same as those set out in the relevant Appendix of this Code; and*
- *The foreign scheme has a manager who is reputable and supervised by an acceptable financial supervisory authority.*

For the avoidance of doubt, if the foreign scheme tracks an index or indices, the index or indices should satisfy the criteria as stated in paragraph 2 of Appendix 7.

Transferable securities

1.3 Transferable securities referred to in paragraph 1.1(a) should meet the following requirements:

a) the potential loss which the scheme may incur with respect to holding the transferable security is limited to the amount paid for it;

b) the transferable security is liquid and holding the transferable security does not compromise the ability of the manager to meet its obligation to redeem units at the request of any qualifying unitholder at any time;

c) the transferable security is subject to reliable and verifiable valuation on a daily basis; and

d) there is regular, accurate and comprehensive information available to the market on the transferable security or, where relevant, on the portfolio of the transferable securities.

Financial derivatives

1.4 Financial derivatives referred to in paragraph 1.1(e) should meet the following requirements:

a) the financial derivatives are liquid and holding the financial derivatives does not compromise the ability of the manager to meet its obligation to redeem units at the request of any qualifying unitholder at any time;

b) the financial derivatives are subject to reliable and verifiable valuation on a daily basis and can be sold, liquidated or closed by an offsetting transaction at any time at their fair value;

c) the financial derivatives result in the delivery of only cash or transferable securities or a combination of both;

d) the execution of over-the-counter (“OTC”) financial derivatives should be carried out on best available terms; and

e) for financial derivatives on commodities, the scheme should ensure that:

i) the transactions are cash settled;

ii) an undertaking is made by the manager in the trust deed and disclosed in the prospectus that the transactions will be cash settled at all times; and

iii) the scheme's investments are sufficiently diversified across different types of commodities.

1.5 In the case of OTC financial derivatives, reliable and verifiable valuation as stated in paragraph 1.4(b) includes a valuation made by the Manager at fair value and which is based either on current market value or an appropriate valuation model checked at an appropriate frequency by an independent third party. The valuation by the Manager should not be based solely on a valuation provided by the counterparty to the transaction.

Note: Item 1.4(e) is elaborated under Chapter I, section 1.3(f) *Financial Derivatives on Commodities* of the consultation paper.

Question 1: MAS seeks your views on the proposal to introduce a list of permissible investments and the accompanying requirements. Specifically:

(i) Do you agree with the introduction of a list of permissible investments?

(ii) If so, do you agree with the accompanying requirements; and

(iii) If not, please explain and provide alternative suggestions.

b) Concentration in Exposures to a Single Entity or Group

Background

1.1.6 Currently, investments in securities issued by a single issuer should not exceed 10% of the deposited property of the scheme ("**Single Issuer Limit**"). Further, investments in securities issued by a group of companies should not exceed 20% of the deposited property of the scheme ("**Single Group Limit**"). Notwithstanding these limits, investments in any security that is a component of a scheme's reference benchmark may be up to the benchmark weighting of the issuer with an additional absolute overweight allowance of two percentage points above the benchmark weight. Investments in securities issued by and deposits placed with an issuer, as well as securities of that same issuer which have been lent, should be aggregated in computing the limits. If the scheme holds as collateral securities issued by the aforementioned issuer, these should also be included in computing the scheme's exposure to that issuer. In addition, exposure to the underlying of a financial derivative has to be included in computing the limits.

Exceptions to the Single Issuer and Single Group Limits are allowed for investments in structured products subject to certain criteria.

1.1.7 The Authority notes that in Luxembourg, Ireland and the United Kingdom, the 20% limit on exposure to a single body, which also applies to companies included in the same group for the purposes of consolidated accounts, is calculated by combining the scheme's total exposure to that single body in the form of transferable securities, money market instruments, deposits, and exposures arising from OTC financial derivative transactions.

Proposals

1.1.8 The Authority proposes to limit a scheme's exposure to a single entity through investments in transferable securities of that entity to 10% of the net asset value of the scheme ("**Single Entity Limit**"). Aggregate exposures to transferable securities, money market instruments, deposits, OTC financial derivative transactions, repurchase arrangements or securities lending agreements will be limited to 20% of a scheme's net asset value. The 20% limit will apply at the entity as well as the group level ("**Group Limit**").

1.1.9 Arising from the above, compliance with the Group Limit may give rise to a situation where a scheme (e.g. a Singapore equity fund) is unable to closely replicate the weighting of a constituent which is (or is part of a group which includes) a financial institution with which the scheme has placed deposits, as the deposits would be included in the current "benchmark + 2%" limit. This reduces the amount that can be invested in securities of the single entity or group of entities. Accordingly, the Authority proposes to permit, in this situation, for the exposure to the group to go up to the entity's benchmark weight plus 2% plus the deposits placed. To manage the risk of over-concentration, the Authority proposes to set a cap of 25% to the Group Limit where the scheme invests in constituents of its benchmark. The proposed formulation for the Single Entity Limit and Group Limit is as follows:

2 Single Entity Limit and Group Limit

2.1 A scheme should comply with the following limits:

a) Investments in transferable securities issued by a single entity should not exceed 10% of the net asset value of the scheme ("single entity limit").

b) Aggregate investments in or exposures to a group of entities (a group of entities is defined as an entity, its subsidiaries, fellow subsidiaries and its holding company) through any or all of the following should not exceed 20% of the net asset value of the scheme ("group limit"):

i) transferable securities;

ii) money market instruments;

iii) eligible deposits;

iv) counterparty risk exposures arising from financial derivative transactions, repurchase agreements and securities lending.

Guidance
Counterparty risk exposures arising from financial derivatives transactions are subject to the limits in paragraph 5.

2.2 Notwithstanding paragraph 2.1, a scheme may invest in any transferable security that is a constituent of a scheme's reference benchmark up to the benchmark weighting of the entity, with an additional absolute overweight allowance of two percentage points above the benchmark weight. In the event that a constituent of the scheme's reference benchmark is, or is part of a group of entities which also includes, a deposit-taking institution with which the scheme has placed deposits, then the aggregate investments in or exposures to the group may be up to the constituent's benchmark weight plus 2% plus the amount of deposits placed. However, in applying this paragraph, the scheme is subject to a cap on aggregate investments in or exposures to a group of entities of 25% of the net asset value of the scheme. The reference benchmark should comply with paragraph 2 of Appendix 7.

Question 2: MAS seeks your views on the proposals to:

(i) limit a scheme's exposure to a single entity through investments in transferable securities of that entity to 10% of the net asset value of the scheme;

(ii) allow a limit of 20% for a scheme’s aggregate investments in or exposures to a group of entities through transferable securities, money market instruments, eligible deposits and exposures to counterparty risk arising from OTC financial derivative transactions, repurchase agreements and securities lending;

(iii) allow the exposure to a constituent of a benchmark index that is (or is part of the same group as) a financial institution with which the scheme has placed deposits, to go up to its benchmark weight plus 2%, plus amount of deposits placed; and

(iv) set a cap on aggregate investments in or exposures to a group of entities of 25% of the net asset value of the scheme where the scheme invests in constituents of its benchmark index.

c) Single issue of securities

Background

1.1.10 The Code currently stipulates that a scheme may not hold more than 10% of any single issue of securities by the same issuer. This rule does not distinguish the specific asset class it is applied to, for example shares or debt securities or both. The Authority however notes that there are separate and distinct limits for investment into non-voting shares and debt issued by a single body in Luxembourg, Ireland and the United Kingdom.

Proposals

1.1.11 The Authority proposes to make a distinction between, and impose separate limits for, investments in shares and debt issued by a single entity. Specifically, recognising the lack of fungibility of shares vis-à-vis debt securities, the 10% limit should apply to total outstanding shares issued by a single entity, while a separate 10% limit applies to each individual issuance of debt securities by any single entity.

1.1.12 The Authority notes that fund managers in Singapore have found medium-term notes ("**MTN**") attractive as an investment. In Singapore, certain individual tranches of MTN programmes issued by Singapore statutory boards are actively traded. In this connection, the Authority proposes to impose a 20% limit per tranche while maintaining an overall 10% limit on the aggregate exposure to a MTN programme. This is consistent with the proposed 10% limit on holdings of each individual issuance of debt securities by any single entity.

1.1.13 The proposed formulation of the guidelines on single issue of securities is as follows:

2.11 A scheme should not invest in more than:

a) 10% of the total outstanding shares of any single entity;

b) 10% of each individual issuance of debt securities of any single entity, where such issuance is not part of a debt issuance programme; or

c) where debt securities are issued under a debt issuance programme, 20% of each tranche, subject to a cap of 10% of the overall outstanding programme size.

Question 3: MAS seeks your views on the proposals to:

(i) limit investment in shares to 10% of the total outstanding shares of a single entity and investment in debt securities to 10% of each individual issuance by a single entity where the issuance is not part of an MTN programme; and

(ii) impose a 20% limit per tranche, while maintaining an overall 10% limit on the aggregate exposure to an MTN programme.

1.2 Credit Ratings

Background

1.2.1 The Single Issuer Limit of 10% in paragraph 2.1 in Appendix 1 may be raised to 35% of the deposited property of the scheme where the issuer is, or the issue is guaranteed by either a government, a government agency or supranational that has a certain minimum credit rating. The limit is relaxed for high quality sovereign and quasi-sovereign securities as the risks of default are lower.

Proposals

1.2.2 The Authority proposes to amend the Code to take into account cases where multiple credit ratings exist. In the event of a difference in ratings by more than one rating agency, the lowest credit rating should be used. In the event where the rating is downgraded to below the minimum credit rating or if the rating agencies no longer rate the entity providing the guarantee, the exception to the 10% Single Issuer Limit will no longer apply.

1.2.3 The Authority also proposes to impose a tighter Single Entity Limit of 5% for unrated or non-investment grade corporate bonds as they carry a higher risk of default.

1.2.4 The proposed formulation is as follows:

2.4 The single entity limit of 10% and group limit of 20% shall be raised to 35% of the net asset value of the scheme where:

a) the entity is, or the issue is guaranteed by, either a government, government agency, or supranational that has a minimum long term issuer rating of BBB by Fitch Inc, Baa by Moody's or BBB by Standard and Poor's (including such sub-categories or gradations therein); and

b) except for schemes with a fixed maturity, not more than 20% of the net asset value of the scheme may be invested in any single issue of securities by the same entity.

2.5 If there is a downgrade in rating to that below the minimum credit rating as stated in 2.4(a), or if the rating agencies no longer rate the entity or the guarantor, the single entity limit and the group limit shall revert to 10% and 20% respectively.

2.6 The single entity limit of 10% and the group limit of 20% do not apply where:

a) the entity is, or the issue has the benefit of a guarantee from, either a government, government agency, or supranational that has a minimum long term issuer rating of AA by Fitch Inc, Aa by Moody's or AA by Standard and Poor's (including such sub-categories or gradations therein); and

b) except for schemes with a fixed maturity, not more than 20% of the net asset value of the scheme may be invested in any single issue of securities by the same entity.

2.7 If there is a downgrade in rating to that below the minimum credit rating as stated in 2.6(a), or if the rating agencies no longer rate the entity or the guarantor, the single entity limit and the group limit as specified in paragraph 2.1 or 2.6, as the case may be, shall apply accordingly.

2.8 Notwithstanding paragraph 2.1, the single entity limit of 10% in paragraph 2.1 for bonds and other debt securities will be lowered to 5% of the net asset value of the scheme if the entity is a corporation which:

a) is not rated;

b) has a rating below that of BBB by Fitch Inc, Baa by Moody's or BBB by Standard and Poor's (including such sub-categories or gradations therein); or

c) has the benefit of a guarantee from a corporate that has a rating below that of BBB by Fitch Inc, Baa by Moody's or BBB by Standard and Poor's (including such sub-categories or gradations therein).

2.9 For purposes of paragraphs 2.4, 2.6 and 2.8, in the event of a difference in ratings by the rating agencies, the lowest credit rating should be used.

2.10 For the avoidance of doubt, the single entity limit and group limit do not apply to placement of short-term deposits arising from:

a) subscription monies received pending the commencement of investment by the scheme;

b) liquidation of investments pending reinvestment; or

c) liquidation of investments prior to the termination or maturity of a scheme, where the placing of these monies with various institutions would not be in the interests of participants.

Question 4: MAS seeks your views on the proposal to:

(i) require the lowest credit rating to be used where multiple credit ratings exist; and

(ii) impose a tighter single entity limit of 5% for non-investment grade corporate bonds.

1.3 Use of Financial Derivatives

a) General Principles

<u>Background</u>

1.3.1 After December 2006, non-specialised schemes may invest in financial derivatives even if the investment is not for hedging or efficient portfolio management ("**EPM**"). The exposure of the scheme to financial derivatives should not exceed 100% of the deposited property of the scheme at any time. Such exposure should be calculated by converting the derivative positions into equivalent positions in the underlying assets embedded in those derivatives. Other methods for calculating exposure may be allowed subject to prior consent from the Authority. The prospectus of the scheme should also disclose certain features of the manager's risk management and compliance process. Although non-specialised schemes are prohibited from investing in commodities (including gold) and their derivatives, they may do so if they come within the ambit of a futures and options fund guidelines as set out in Appendix 7 of the Code.

1.3.2 In our study on major fund centres, the Authority notes that the European Undertakings in Collective Investments in Transferable Securities ("**UCITS**") framework has comprehensive risk management guidelines pertaining to the use of financial derivatives. In the U.S., there are also regulations on the use of financial derivatives that focus on principles to limit borrowings, establish custody and segregation rules as well as address the issue of 'cover'.

<u>Proposals</u>

1.3.3 In order to mitigate the risks arising from the use of financial derivatives, the Authority proposes that the following principles be applied to schemes that use financial derivatives:

Principle 1: Limitation of loss

To ensure that the liabilities of the investors are limited to their investment in the scheme, the trust deed of the scheme should contain a provision limiting the liability of the investors to their investment in the scheme.

Principle 2: Limitation of use

Leverage is often associated with the use of financial derivatives, resulting in the scheme potentially having exposures to market risk beyond the net asset value of the scheme. Global exposure is a measure of the incremental exposure and leverage generated by a scheme through the use of financial derivatives. As such, current limits on global exposure to financial derivatives of 100% of the net asset value of a scheme at any time will be retained.

Principle 3: Adequate cover

The scheme should, at all times, be able to fulfill its obligations with respect to financial derivatives, whether in the form of payment or delivery. This means that for contracts involving physical delivery by the scheme, the scheme needs to hold the underlying instruments in its portfolio, or equivalent liquid assets which can be converted into the underlying instruments.[1]

Principle 4: Adequate liquidity
A key risk of OTC financial derivatives is liquidity and the ability of the manager to unwind the financial derivative transactions at fair value within a reasonable period. As such, the Authority proposes that transferable securities and financial derivatives should be liquid.

Principle 5: Independent valuation for OTC derivatives
A scheme has to be able to determine the fair value of all OTC financial derivatives in its portfolio on a daily basis. The valuation should be based on market value or an appropriate valuation model. To ensure independence, the valuation of an OTC financial derivative should not be based solely on the prices provided by the counterparty. An independent verification, including but not limited to those conducted by the manager's in-house valuation personnel, should be obtained by the manager as well.

Principle 6: Limitation of counterparty risk for OTC derivatives
As OTC financial derivatives expose the scheme to counterparty risks, schemes which invest in such instruments should comply with the new proposed guidelines on counterparty limits set out in the section 1.4 *Counterparty Risks*.

b) Commitment Approach

1.3.4 In calculating the global exposure of a scheme to financial derivatives, the Authority proposes to retain the current use of the commitment approach whereby the financial derivative positions of a scheme are converted into equivalent positions in the underlying assets. For the avoidance of doubt, financial derivatives used for hedging do not count towards the financial derivative exposure calculation. In implementing Principles 1 to 3, the Authority seeks to expand the current guidelines on the commitment approach as follows:

4 Financial Derivatives

4.1 Schemes that make use of financial derivatives should ensure that the risks related to such financial instruments are duly measured, monitored and managed.

4.2 The liability of the investors should be limited to their investment in the scheme. For this purpose, the trust deed of the scheme should contain a provision limiting the liability of investors to their investment in the scheme.

4.3 A transaction in financial derivatives which gives rise, or may give rise, to a future commitment on behalf of a scheme should be covered, in particular:

[1] A working definition of "liquid" is proposed under Chapter IX, section 9.2 *Definition of 'Liquid'* of this consultation paper.

a) in the case of financial derivatives which will, or may at the option of the scheme, be cash settled, the scheme should hold, at all times, liquid assets sufficient to cover the exposure.

b) in the case of financial derivatives which will, or may at the option of the counterparty, require physical delivery of the underlying assets, the scheme should hold the underlying assets in sufficient quantities to meet the delivery obligation at all times. If the manager deems the underlying assets to be sufficiently liquid, the scheme may hold as coverage other liquid assets in sufficient quantities, provided that such alternative assets may be readily converted into the underlying asset at any time to meet the delivery obligation. The manager should disclose in the prospectus the basis for the scheme's compliance with this paragraph notwithstanding that the scheme does not hold the underlying assets.

<u>Exposure to financial derivatives</u>

4.4 The exposure of a scheme to financial derivatives should not exceed 100% of the net asset value of the scheme at any time. Where a scheme has invested cash collateral received as a result of securities lending and repurchase transactions in transferable securities, the 100% limit should be reduced by the value of the transferable securities. The exposure of the scheme to financial derivatives (including those embedded in transferable securities or money market instruments) should be determined using the Commitment Approach described below.

4.5 Under the Commitment Approach, the positions in financial derivatives should be converted into equivalent positions in the underlying assets.

4.6 The scheme's total exposure to financial derivatives is then quantified as the sum of the absolute values of the individual positions. Financial derivatives used for hedging purposes will not be counted as part of the scheme's total financial derivatives exposure as long as:

a) the use of such financial derivatives results in an overall reduction of the risk of the scheme; and

b) the marked-to-market value of the financial derivatives and the underlying assets of the scheme (to which the hedging financial derivative transaction applies), exhibit a high negative correlation.

4.7 The table below sets out the method for calculating exposure under the Commitment Approach. For financial derivatives not covered below, the manager should notify the Authority of the method applied.

Types of financial derivatives	Method for calculating exposure
Share option	**Market value of the underlying asset, adjusted by the option's delta** No. of contracts x no. of shares x underlying price x delta
Bond option	**Market value of the underlying asset, adjusted by the option's delta** No. of contracts x face value x underlying price x delta
Warrant	**Market value of the underlying assets, adjusted by the option's delta**
Index futures	**Market value of the contract or the underlying asset** No. of contacts x value of 1 point x index level
Bond future	**Market value of the contract or the underlying asset** No. of contracts x notional of the future contract x market value of the future Or No. of contracts x notional x market price of the cheapest bond to be delivered, adjusted by the conversion factor
Forward exchange	Principal of the contract
Interest rate swap	Principal of the contract
Currency swap	Principal of the contract
Credit default swaps	Protection buyer: sum of the premiums to be paid during the entire life of the contract Protection seller: contract's notional value
Total rate of return swap	Protection buyer and seller: contract's notional value

4.8 A scheme is not permitted to use the calculation method set out above in the case of financial derivatives for which the conversion of the position in the financial derivatives into the equivalent position in the underlying asset, by taking the market value of the underlying asset, does not provide for an adequate and accurate assessment of the risks relating to the product. Financial derivatives that do not qualify for the standard conversion method are, for instance, digital options, barrier options, or more complex options with a highly volatile delta.

4.9 The scheme may apply to the Authority to use an alternative method of calculating financial derivative exposure as set out in Annex 1c of Appendix 1. Such a scheme should comply with guidelines in Annex 1c, in lieu of paragraphs 4.4 to 4.7 of Appendix 1.

Question 5: MAS seeks your views on the proposed principles to be applied to schemes that invest in financial derivatives and the method for calculating the scheme's exposure to specific financial derivatives based on the prescribed table.

c) Alternative Methods

1.3.5 It is not the Authority's intention to restrict the global exposure calculation methodology to the commitment approach. Recognising that foreign regulatory frameworks such as UCITS allow for alternative methods of calculation, including value-at-risk ("**VAR**"), the Authority proposes to allow managers to use the VAR method provided that they have the necessary risk management processes in place subject to prior consultation with the Authority.

1.3.6 The VAR method measures the maximum expected loss at a given probability over a specific time period under normal market conditions. The method however does not give the potential absolute loss that the scheme may be exposed to when tail risk events take place. In addition, it measures the probability of risk of loss rather than explicit leverage. Hence, it is possible that when using the VAR method, a scheme may have a higher level of leverage than that permitted under the Code. Despite its drawbacks, the VAR approach can be a good measure of the scheme's total risk when augmented with rigorous stress testing and back-testing procedures.

1.3.7 The VAR method quantifies the maximum potential loss to the scheme under normal market conditions. As the VAR method does not estimate the potential loss to the scheme in extreme market conditions, stress testing which simulates the potential loss to the scheme under various adverse market conditions should be performed to complement the use of VAR. The stress test can be performed using scenario analysis of future probable events. The scenarios used should be adapted to the nature of the scheme's positions and risks. Any fundamental change in the investment strategy should be accompanied by a recalibration of the stress scenarios. It is proposed that the stress tests be done monthly.

1.3.8 As an unreliable model may result in the possibility that the actual risks to the scheme are understated, it is also proposed that back-testing be carried out to validate the reliability and efficiency of the VAR model and parameters used. It will serve to highlight any deficiencies in the fund manager's VAR model in capturing risk so that appropriate modifications to the model can be made. If the daily hypothetical fluctuations of the scheme exceed the computed VAR calculation limits on more occasions than envisaged using certain confidence levels, the manager should take rectification measures immediately. It is proposed that the back tests be conducted monthly.

1.3.9 The proposed guidelines on the use of VAR are as follows:

Annex 1c : An Alternative Approach
for Calculating Financial Derivatives Exposure

1 Scope

These guidelines apply to a scheme which elects to use the Value-at-Risk ("VAR") approach for calculating the scheme's financial derivative exposure.

2 Calculation Methodology

2.1 The exposure of a scheme to financial derivatives can be determined using the VAR approach described below. The exposure of the scheme should be limited as follows:

a) if a reference portfolio (or benchmark for the scheme) can be determined, the scheme should use a relative VAR calculation where the VAR of the scheme cannot be more than 1.5 times the VAR of the reference portfolio. The choice of the reference portfolio (or benchmark) should be disclosed in the prospectus and documented in the manager's risk management process.

b) where there is no reference portfolio (or benchmark for the scheme), an absolute VAR limit should be used. The choice of the absolute VAR limit should be commensurate with the investment objective, investment universe and investment strategy of the scheme. The manager should disclose in the prospectus and document in its risk management process the rationale for the choice of absolute VAR limit used.

Any investments of cash collateral received as a result of securities lending and repurchase transactions in transferable securities should be taken into account in calculating the VAR of the scheme.

2.2 Under the VAR approach, the following parameters should be used:

- Confidence level: 99%
- Holding period: 1 month (20 days)
- Observation period: 1 year (250 days), unless a shorter period is justified by a significant increase in volatility
- Quarterly update of the data
- Calculation frequency: daily

A different confidence interval or holding period may be used with prior approval of the Authority provided a conversion is made to bring the VAR to an equivalent value.

Stress test

2.3 Any scheme that uses the VAR approach should perform a rigorous program of stress tests on the scheme. The program should cover all the risk factors that have a non-negligible influence on the scheme's net asset value and deal with correlation changes between the risk factors. The stress test calculations should be done with a frequency which is in line with the scheme's risk profile, but at a minimum, monthly. The manager should analyse the results of the stress tests and take appropriate action if the need arises.

3 Back-testing

3.1 Back-testing is the comparison of daily profit or loss ("trading outcomes") with model-generated risk measures. Schemes should back-test its VAR model, with a frequency which is in line with the scheme's risk profile, but at a minimum, monthly. The back-testing framework should conform to the following standards:

a) the back-tests to be applied should compare whether the observed percentage of outcomes covered by the risk measure is consistent with a 99th percentile, one-tailed confidence interval calibrated to a one-day holding period;

b) trading outcomes used for back-testing should be based on the hypothetical changes in the scheme's net asset value which would occur if end-of-day positions were to remain unchanged over the one-day holding period. This hypothetical profit and loss does not account for other factors such as fees, commissions, bid-ask spreads, net interest income and intra-day trading;

c) computation of VAR for the purpose of back-testing should be performed on a daily basis using at least 250 business days of observed results. On a quarterly basis, a scheme should analyse the back-testing exceptions and submit a report to the manager's senior management;

d) the results of back-testing and any follow-up action taken should be clearly documented. All back-testing exceptions, i.e. where trading outcomes are not covered by the risk measure, should be investigated and accounted for on a timely basis;

e) back-testing exceptions generated should be classified as follows:

  i) basic integrity of the model;

  ii) model accuracy can be improved;

  iii) market moved in a fashion unanticipated by the model;

f) back-testing exceptions relating to the basic integrity of the risk measurement model should be reported to the manager's Board and senior management immediately and be rectified as soon as possible; and

g) a back-testing report should be prepared for the manager's Board and senior management on a monthly basis, incorporating an analysis of the back-testing results and exceptions and any implications for the scheme.

3.2 A scheme should classify its back-testing outcomes into three zones depending on the number of exceptions arising from back-testing. The manager should notify the Authority within three business days whenever exceptions arise. In the event that the scheme enters into a:

a) Green Zone [4 or less exceptions]: the manager need not make any changes to its VAR model;

b) Yellow Zone [5 - 9 exceptions]: the manager is to investigate and propose to the Authority the remedial actions;

c) Red Zone [10 or more exceptions]: the Authority may require the scheme to stop adding new positions and wind down existing positions in order to reduce market risks. Further, the Authority may require the scheme to revert to the commitment approach to calculate global exposure.

3.3 The scheme should perform back-tests using actual trading outcomes. If there are significant back-testing exceptions using actual trading outcomes, the scheme should implement additional risk measures to monitor its intra-day trading risk in line with sound risk management practices.

3.4 The manager should decide if it is prudent to continue trading in products or areas where the market risk measurement model is found to be inadequate for modeling the risks involved. If the problem with the model is significant, the scheme should cease trading in those products or areas.

3.5 The following are some examples which may be classified under the three exception categories described in paragraph 3.1 (e):

a) Basic integrity of the model:

i) the systems of the scheme are not capturing the market risk of the positions; or

ii) model volatilities or correlations are calculated incorrectly;

b) Model accuracy can be improved; the risk measurement model is not assessing the risk of some instruments with sufficient precision (e.g. too few maturity buckets or an omitted spread);

c) Market moved in a fashion unanticipated by the model;

i) random chance (i.e. a very low probability event);

ii) markets moved by more than the model predicted was likely (i.e. volatility was significantly higher than expected);

iii) market did not move together as expected (i.e. correlations were significantly different than what was assumed by the model).

Guidance
Although results within the Green Zone are preferred, a market risk measurement model which constantly yields little or no back-testing exceptions may suggest that the model is too conservative. If the model shows no exceptions for long periods of time, the manager should reassess its model to determine if it overstates risk.

4 Definition of the Green, Yellow and Red Zones

Zone	Number of exceptions	Cumulative probability
	0	8.1%
	1	28.58%
Green Zone	2	54.32%
	3	75.81%
	4	89.22%
	5	95.88%
	6	98.63%
Yellow Zone	7	99.60%
	8	99.89%
	9	99.97%
Red Zone	10 or more	99.99%

4.1 The table defines the Green, Yellow and Red Zones used to assess back-testing results of a scheme. The boundaries shown in the table are based on a sample of 250 observations. For other sample sizes, the Yellow Zone begins at the point where the cumulative probability equals or exceeds 95%, and the Red Zone begins at the point where the cumulative probability equals or exceeds 99.99%. The cumulative probability is the probability of obtaining equal or less than a given number of exceptions in a sample of 250 observations when the true coverage level is 99%. For example, the cumulative probability shown for 4 exceptions is the probability of obtaining between 0 and 4 exceptions.

Question 6: MAS seeks your views on the proposed guidelines on the VAR approach for calculating the exposure of a scheme to financial derivatives.

d) Risk Management Process

1.3.10 It is important that managers establish robust risk management processes ("**RMP**") which are appropriate for and commensurate with a scheme's use of financial derivatives. The Authority proposes that the manager submit a document detailing its RMP in respect of the use of financial derivatives, in their application to use an alternative exposure calculation method for financial derivatives. The proposed information to be submitted in the RMP document are as follows:

> Risk management process
>
> 4.11 Alternative methods for calculating financial derivative exposure may be allowed subject to prior consultation with the Authority.
>
> 4.12 In making a submission, the manager should furnish the Authority with a document on the manager's risk management process with information on:
>
> a) Details of entities, units and personnel responsible for risk management;
>
> b) Policies of the manager on expertise required to trade and manage financial derivatives and their related risks including how they are monitored and validated;
>
> c) Details of all financial derivatives to be used in the scheme, the purpose of the use, as well as the risks these financial derivatives might pose to the scheme;
>
> d) Description of valuation rules and pricing methodology for financial derivatives;
>
> e) Description of the risk management processes and systems used in relation to the use of financial derivatives;
>
> f) Description of the Value-at-Risk methodology, whether the model has been verified by an independent party (including any regulator) and any other risk measures used; and
>
> g) Description of systems and technology used, including description of stress testing and back-testing methodologies, if applicable.
>
> 4.13 The risk management process document should include a description of how all the relevant guidelines in the Code are adhered to. For schemes that elect to use the VAR approach for calculating financial derivatives exposure, the choice and rationale of the reference portfolio (when relative VAR is used) should be stated in the risk management process document. If the reference portfolio is different from the benchmark proposed for the scheme, the manager should explain the rationale for its choice in the risk management process document and the prospectus. For managers who use a VAR approach based on their internal VAR model, there should be a third party verification of the VAR model.

4.14 The Authority should be notified of material amendments to the initial filing at least one month before such amendments are made. Where the Authority raises an objection, the amendments may not be made.

Question 7: MAS seeks your view on:

(i) the proposal for the manager to submit information on its risk management process to MAS for consideration when applying for the use of an alternative exposure calculation method for financial derivatives; and

(ii) the proposed information required in the risk management process document to be submitted to MAS.

e) Disclosures

1.3.11 The Authority proposes that the prospectuses of relevant schemes should contain additional information to explain the nature and risks of investments in financial derivatives. The proposed disclosures are:

11 Disclosure

The prospectus of the scheme should include the following:

a) whether financial derivatives employed in the scheme are used for the purposes of hedging, efficient portfolio management (as defined in Section 2: Interpretation of the Code), to optimise returns or a combination of all three objectives;

b) the methodology used for determining the scheme's exposure to financial derivatives; and

c) a statement that the manager will ensure that the risk management and compliance procedures are adequate and has been or will be implemented and that it has the necessary expertise to control and manage the risk relating to the use of financial derivatives.

Question 8: MAS seeks your views on the proposed prospectus disclosures in respect of financial derivatives.

f) Financial Derivatives on Commodities

Background

1.3.12 Currently, non-specialised schemes are prohibited from investing in commodities (including gold) and their derivatives. Physical commodities do not satisfy the key characteristic of liquidity required of a transferable security[2]. While most physical commodities can be sold for cash within seven business days, there still exists a risk that some commodities (especially when traded in large quantities) may not be easily liquidated without significantly affecting their price. Besides liquidity risks, there are also valuation and custody risks involved withholding physical commodities. Hence, investing in physical commodities will introduce multiple dimensions of risks to investors.

1.3.13 The Authority notes that under the UCITS framework, investments in physical commodities (including gold) are not allowed. However, index funds which seek to gain exposures to commodities through indices based on derivatives on commodities are allowed as long as the index has characteristics which qualify it to be a financial index.

Proposals

1.3.14 The Authority proposes to allow non-specialised funds to invest in financial derivatives on commodities provided that the transactions are cash settled and appropriately diversified across different types of commodities. For the avoidance of doubt, investment in physical commodities including gold (notwithstanding its unique feature to act as a store of value) would continue to be disallowed. In general, the Authority considers that a scheme which invests in at least three sub-groups of commodities (e.g. energy, industrial metals and agriculture) to be sufficiently diversified.

1.4f) For financial derivatives on commodities, the scheme should ensure that:

i) the transactions are cash settled;

ii) an undertaking is made by the manager in the trust deed and disclosed in the prospectus that the transactions will be cash settled at all times; and

iii) the scheme's investments are sufficiently diversified across different types of commodities.

Question 9: MAS seeks your views on the proposal to allow non-specialised schemes to invest in financial derivatives on commodities provided that the transactions are cash settled and sufficiently diversified.

[2] The proposed characteristics of a transferable security are discussed under section Chapter I, section 1.1(a) *Unlisted Securities* of the consultation paper.

g) Removal of Appendix 7 and Appendix 8

1.3.15 In view of the proposed safeguards on the use of financial derivatives and the allowance for non-specialised schemes to invest in financial derivatives on commodities, the Authority proposes to remove the guidelines on futures and options funds (i.e. Appendix 7 of the Code) and currency funds (i.e. Appendix 8 of the Code).

Question 10: MAS seeks your views on the proposal to remove the guidelines on futures and options funds (i.e. Appendix 7) and currency funds (i.e. Appendix 8) in light of the proposals on the use of financial derivatives for non-specialised funds.

1.4 Counterparty Risks

Background

1.4.1 OTC financial derivatives transactions such as swaps, repurchase agreements ("repos"), forward rate agreements and exotic options are generally privately negotiated. These instruments are not cleared through a clearing house as opposed to exchange-traded derivatives. In these OTC transactions, there are usually no mandated marked-to-market or margin requirements. Hence, schemes which invest in OTC instruments will face a risk that the counterparty may default on its obligations. With the increasing use of OTC financial derivatives by managers in retail schemes, it has become important for the Authority to consider safeguards in the Code to address counterparty risk.

1.4.2 The Authority notes that Luxembourg and Ireland have well-established counterparty rules that prescribe the calculation of counterparty exposures, acceptable forms of collateral, and the recognition of netting in the calculation of counterparty limits. One key principle is that the exposure is measured based on the maximum potential loss that will be incurred by the scheme if the counterparty defaults and not the notional value of the OTC contract.

Proposals

1.4.3 The Authority proposes that managers may only enter into OTC financial derivative transactions with a counterparty which is a financial institution subject to prudential supervision by a financial regulator in its home jurisdiction. If the financial derivative transaction is performed on an exchange where the clearing house performs a central counterparty role, characterised by use of daily mark-to-market valuation of the derivative positions and daily margining requirements, the counterparty risk is taken as zero.

1.4.4 In calculating the counterparty exposure, the Authority proposes that the replacement cost (i.e. current exposure) and the potential future credit risk (i.e. potential future exposure) to be taken into account. The replacement cost is the net aggregate market value of all outstanding OTC derivatives positions, i.e. the cost of entering into a new contract with another counterparty if the counterparty defaults. The future potential credit risk approximates the credit exposure until maturity of the contract, i.e. it is an estimate of the maximum amount a fund will lose in the event of a counterparty default between the date of calculation and the maturity of the contract. The proposed approach differs from the European UCITS framework where a further risk weight in respect of the counterparty is applied. The application of the risk weight would have the effect of lowering the overall calculated counterparty risk exposure. We are thus of the view that a risk weight would not be appropriate given the intention of capturing the maximum potential loss in the event of counterparty default.

1.4.5 At the same time, the Authority proposes that a scheme's counterparty exposure may be lowered if the counterparty posts suitable collateral with the scheme. Additionally, contractual netting will be allowed to arrive at total exposure provided certain conditions are met.

1.4.6 The proposed formulation for the rules on counterparty exposure is as follows:

5 Criteria and Limits for Counterparty of OTC Financial Derivatives

5.1 The counterparty of the scheme in an OTC derivative contract should be subject to prudential supervision by a financial supervisory authority in its home jurisdiction. Subject to the single entity limit and group limit in paragraph 2.1, the maximum exposure of a scheme to an OTC derivative counterparty may not exceed:

a) in the case of an eligible financial institution described in paragraph 5.2 below, 10% of its net asset value;

b) in any other case, 5% of its net asset value.

5.2 An eligible financial institution should have a minimum long term credit rating of A by Moody's, A by Standard and Poor's or A by Fitch (including sub-categories or gradations therein). Alternatively, where the financial institution is not rated, the scheme should have the benefit of a guarantee by an entity which has a rating of A (including sub-categories or gradations therein). In the event of a difference in ratings by the three rating agencies (Standard and Poor's, Moody's and Fitch Inc), the lowest credit rating should be used.

5.3 The exposure to a counterparty in an OTC financial derivative contract should be measured based on the maximum potential loss that may be incurred by the scheme if the counterparty defaults and not on the basis of the notional value of the OTC financial derivative.

<u>Calculation Method</u>

5.4 Except with the Authority's approval, exposure to a counterparty should be calculated as follows:

<u>Stage 1:</u>

a) For each OTC financial derivative contract, the current replacement cost is determined by carrying out a valuation at market price.

Stage 2:

b) In order to reflect the risk which may be incurred later, the amount of the notional principal or the underlying asset of the OTC financial derivative contract is multiplied by the following percentages to derive the “add-on factor”:

Residual Term	Interest rate contracts	Exchange rate contracts	Ownership title contracts	Other contracts
1 year or less	0%	1%	6%	10%
> 1 year and < 5 years	0.5%	5%	8%	12%
> 5 years	1.5%	7.5%	10%	15%

i) For credit derivatives that are total return swaps and credit default swaps, the relevant percentage is 10% regardless of the residual term.

ii) However, for credit default swaps where the scheme acts as protection seller, the relevant percentage may be set at 0% unless the credit default swap contract incorporates a provision on closeout upon insolvency. In the latter case, the amount to be taken into account for the add-on factor will be limited to the premium/interest to be received, i.e. unpaid premium at the time of the calculation.

c) The sum of the replacement cost (where positive) computed in Stage 1 and the add-on factor computed in Stage 2 is the counterparty exposure arising from the OTC financial derivative contract. The total exposure to a single counterparty or group of counterparties is then calculated by summing the exposures arising from all OTC financial derivative contracts entered into with the same counterparty or group.

Recognition of collateral

5.5 The exposure to a counterparty may be construed as being lower if collateral is tendered to the scheme. The collateral should meet the following requirements:

a) marked-to-market on a daily basis and exceeds the value of the amount at risk;

b) fixed income securities issued by, or has the benefit of a guarantee from, either a government, government agency, or supranational that has a long term issuer rating of AAA by Fitch Inc, Aaa by Moody’s or AAA by Standard and Poor’s. In the event of a difference in ratings by the three rating agencies (Standard and Poor’s, Moody’s and Fitch Inc), the lowest credit rating should be used;

c) is liquid;

d) does not have a material positive correlation with the credit quality of the counterparty;

e) held by a third party custodian who is not related to the counterparty and is legally secured from the consequences of the failure of the counterparty or its related party;

f) can be fully enforced by the scheme at any time; and

g) is free from all prior encumbrances.

In addition, the manager should ensure that it has the appropriate legal expertise, systems and operational capabilities for proper collateral management.

Recognition of netting

5.6 A scheme may net its OTC financial derivative positions vis-à-vis the same counterparty. The Authority may recognise bilateral contracts for novation between a scheme and its counterparty for netting purposes provided that such contracts satisfy the following conditions:

a) Mutual claims and obligations are automatically amalgamated in such a way that this novation fixes one single net amount each time novation applies and thus creates a legally binding, single new contract extinguishing former contracts;

b) the scheme has a legally valid, binding and enforceable netting agreement with its counterparty which creates a single legal obligation, covering all included transactions, such that, in the event of the counterparty's failure to perform owing to default, bankruptcy, liquidation or any other similar circumstance, the scheme would have a claim to receive or an obligation to pay only the net sum of the positive and negative mark-to-market values of the individual included transactions;

c) the scheme obtains written and reasoned legal opinions to the effect that, in the event of a legal challenge, the relevant courts and administrative authorities would find that the scheme's claims and obligations would be limited to the net sum, as described in (b), under:

    i) the law of the jurisdiction in which the counterparty is incorporated and, if a foreign branch of an entity is involved, also under the law of the jurisdiction in which the branch is located;

    ii) the law that governs the individual included transactions; and

iii) the law that governs the netting agreement.

d) the scheme has procedures in place to ensure that the legal validity of its netting agreements is kept under review in the light of possible changes in the relevant laws; and

e) the manager is satisfied, that the netting agreement is legally valid under the law of each of the relevant jurisdictions.

5.7 The manager should disclose in the prospectus that the legal opinions described in paragraph 5.6 have been obtained by the manager.

Exchange Traded Financial Derivatives

5.8 All financial derivatives which are not subject to the counterparty limit in paragraph 5.1 should be performed on an exchange where the clearing house performs a central counterparty role, and where trades are characterised by a daily marked-to-market valuation of the derivative positions and at least daily margining.

Question 11: MAS seeks your views on the proposals to:

(i) allow the manager to enter into an OTC financial derivative transaction with a counterparty which is a financial institution subject to prudential supervision in its home jurisdiction;

(ii) calculate the counterparty exposure by taking into account the replacement cost and the potential future credit risk;

(iii) allow reduction of counterparty exposure through the use of collateral which meets the proposed requirements; and

(iv) allow reduction of counterparty exposure through netting under the proposed circumstances.

1.5 Securities Lending

Background

1.5.1 The Code allows a non-specialised scheme to lend securities up to 50% of its deposited property provided that adequate collateral, in the form of instruments (such as irrevocable letters of credit and banker's guarantees) consistent with the investment objective and character of the scheme and with a remaining term to maturity of not more than 366 days, is taken. Where the scheme is also entitled at all times to immediately recall the securities lent without penalty, up to 100% of the deposited property of the scheme may be lent.

1.5.2 Securities lending is commonly used by funds to generate additional income for the benefit of its investors. Schemes lend securities to enhance performance or reduce the impact of fund administration expenses on the net asset value. In Luxembourg, Ireland and the United Kingdom, securities lending is a permissible technique used for EPM. Yet market events in the past few years have brought securities lending programmes ("**SLPs**") under scrutiny. In 2008, as a result of illiquidity of the collateral held and security-specific defaults, index funds incurred realised and unrealised losses in their cash collateral investment pools. Illiquidity within these collateral pools has adversely affected the overall liquidity of the index fund causing these funds to implement redemption restrictions. Many investors only became aware that the funds had entered into securities lending arrangements when the restrictions were imposed.

Proposals

1.5.3 The Authority considers securities lending to be an arrangement under which the lender transfers securities to the borrower (also referred to as the counterparty) by way of sale and the borrower agrees to transfer those securities, or securities of the same type and amount, back to the lender at a later date via a repurchase. In accordance with standard market practice, there must be a separate transaction which transfers collateral to the lender to cover the risk that the future resale/repurchase of the securities cannot be satisfactorily completed. All benefits of ownership, except proxy voting, are transferred back to the lender under contractual arrangements.

1.5.4 The Authority believes that allowing securities lending for the purpose of EPM is in line with global practice. However, in light of recent events, existing guidelines on securities lending should be strengthened. Securities lending requires extending credit, managing interest rate and market risks, and assessing exposures. Managers can only make effective investment decisions on SLPs provided that appropriate risk management tools are applied. The Authority therefore proposes to enhance the existing safeguards by establishing prudential limits, guidelines and disclosures to address associated risks arising from securities lending. With the enhanced safeguards, the Authority proposes to remove the current limit of 50% of net asset value on securities lending, provided that the securities lending is carried out for the purposes of EPM.

a) Scope

1.5.5 The Authority proposes the following scope for securities lending:

1 Scope

1.1 Schemes should carry out securities lending only for the purpose of efficient portfolio management.

1.2 For the purpose of this Annex, in the event of a difference in ratings by the three rating agencies (Standard and Poor's, Moody's and Fitch Inc), the lowest credit rating should be used.

Question 12: MAS seeks your views on the proposed scope of securities lending.

b) Securities Lending Programmes

1.5.6 A principal lending programme is one where the scheme selects and lends securities directly to its counterparties. On the other hand, an agent lending programme is one where the scheme delegates authority to a third party (i.e. the agent) to manage counterparty credit risk, collateral, cash collateral reinvestment and other securities lending related activity. In both cases, the scheme is ultimately responsible for the risks in the SLPs. It is proposed that schemes may lend securities directly or through recognised clearing systems or securities lending agents who specialise in securities lending.

2 Securities Lending Programmes

The scheme may lend securities directly or through a standardised lending system organised by a recognised clearing institution or through securities lending agents, who are recognised as specialists in securities lending. Securities lending may only be carried out in accordance with good market practice.

Question 13: MAS seeks your views on the proposal to allow schemes to lend securities directly, through recognised clearing systems or securities lending agents who are specialists in securities lending.

c) Counterparty Risk

1.5.7 We propose to establish guidelines to address counterparty credit risk arising from securities lending as follows:

3 Borrower Risk

3.1 The scheme's counterparty in a securities lending agreement should be a financial institution subject to prudential supervision by a financial supervisory authority in its home jurisdiction.

3.2 If the manager, on behalf of the scheme, lends the securities of the scheme to its related entities, the manager should disclose any conflicts of interest and how they are mitigated in the prospectus.

3.3 The borrower to a securities lending arrangement entered into by the scheme directly or through its agent should have a minimum long term credit rating of A by Moody's, A by Standard and Poor's or A by Fitch (including sub-categories or gradations therein). Alternatively, an unrated borrower will be acceptable if an entity which has and maintains a rating as stated above indemnifies the scheme against losses suffered as a result of a borrower failure.

3.4 Subject to paragraph 2 on the single entity limit and group limit, the scheme or its agent should ensure that risk exposure to a single borrower of the scheme arising from one or more securities lending transactions may not exceed 10% of its lent assets.

3.5 The collateral should be available at all times, either directly or through its agent, in such a manner that the scheme or its agent can appropriate or realise the assets given as collateral, without delay, if the borrower does not comply with its obligation to return the securities.

3.6 The scheme should ensure that the scheme or its agent can discharge its contractual rights in case of Borrower liquidation, reorganisation or any other similar situation. The contracts should at a minimum provide the scheme or its agent with clear rights to immediately recall the securities on loan, and if they cannot be returned, to seize the collateral.

Question 14: MAS seeks your views on the proposals set out above to address counterparty risks in securities lending.

d) Collateral Deficiency Risk

1.5.8 The Authority proposes that eligible collateral be liquid and readily realisable and consist of cash, money market and fixed income securities. To further mitigate credit risk, the issuer of the collateral should not be related to the borrower. The value of collateral obtained should follow market convention (such as those set by the International Securities Lending Association) and should at all times equal or exceed, the value of the securities lent. In the agreement between the scheme and the borrower, there should be provisions to require the borrower to readily provide additional collateral in cases where the collateral provided is insufficient compared to the amount to be covered. The agreement should also provide for safety margins (i.e. excess collateral) that take into consideration exchange risks or market risks.

4 Collateral Deficiency Risk

4.1 Collateral obtained by the scheme or its agent under securities lending arrangement should be liquid, not have a material positive correlation with the credit quality of the Borrower and in the form of the following:

a) Cash;

b) Irrevocable letters of credit with residual maturity of less than 3 months, bankers guarantees commercial paper with no embedded derivative content or certificates of deposits. These collateral types should be issued by entities with a short term credit rating of at least F-1 by Fitch Inc, Prime-1 by Moody's or

A-1 by Standard & Poor’s;

c) Securities where the entity is, or the issue has the benefit of a guarantee from, either a government, government agency, or supranational that has a minimum long term issuer rating of A by Fitch Inc, A by Moody’s or A by Standard and Poor’s (including such sub-categories or gradations therein); or

d) Corporate debt securities rated at least A by Fitch Inc, A by Moody's or A by Standard & Poor’s, (including sub-categories or gradations therein).

4.2 For avoidance of doubt, asset backed securities, collateralised debt obligations, structured notes and other financial assets with embedded derivative content are not allowed as collateral.

4.3 Eligible collateral obtained by the scheme or its agent should:

a) be marked-to-market daily; and

b) have a value of not less than 100% of the securities lent.

4.4 The agreement between the scheme and the borrower, directly or through its agent, should require the borrower to provide additional collateral to the scheme or its agent within a time period consistent with market practice if the current value of the collateral tendered is insufficient. Furthermore, the aforementioned agreement should, if appropriate, require that excess collateral be provided to take into consideration exchange rate or market risks inherent to the assets accepted as collateral.

Question 15: MAS seeks your views on the safeguards proposed to address collateral deficiency risk in securities lending.

e) Settlement Risk

1.5.9 To address settlement risk, we propose that eligible collateral should be received prior to, or simultaneously with, the transfer of the securities lent. At maturity, the eligible collateral should be remitted simultaneously with, or subsequently to, the restitution of the securities lent.

5 Settlement Risk

The scheme or its agent should receive eligible collateral before, or simultaneously with, the transfer of ownership of the securities lent. Upon termination, the eligible collateral will be remitted by the scheme or its agent after, or simultaneously with the restitution of the securities repurchased.

Question 16: MAS seeks your views on the safeguards proposed to address settlement risk in securities lending.

f) Custody Risk

1.5.10 The Authority proposes that the custodian holding the scheme's collateral should be regulated by the financial regulator in its home jurisdiction and independent from the borrower. The collateral is to be kept by the custodian. The collateral cannot be sold, given as security, pledged or hypothecated. We propose the following:

6 Custody Risk

Eligible collateral obtained by the scheme or its agent:

a) should be kept by a custodian independent of the Borrower. The custodian should be a financial institution subject to prudential supervision by the financial supervisory authority in its home jurisdiction and have a minimum long-term credit rating of A by Moody's, A by Standard and Poor's or A by Fitch (including sub-categories or gradations therein). The custodian should be a named participant to the collateral arrangements. Alternatively, where the custodian is not rated, the scheme should have the benefit of a guarantee by an entity which has a rating as stated above; and

b) cannot be sold, given as security, pledged or hypothecated.

Question 17: MAS seeks your views on the safeguards proposed to address custody risk in securities lending.

g) Risks associated with cash collateral investments

1.5.11 The Authority proposes that cash collateral may only be invested in money market or fixed income securities. To further mitigate credit risk, the issuer of these securities should not be related to the borrower. We also intend to propose the following rules on diversification, custody and limits on leverage from investment of cash collateral:

7 Risks Associated with Investment of Cash Collateral

7.1 Collateral obtained by the scheme or its agent, in the form of cash, may only be invested in the following eligible financial assets, provided that they are liquid and readily realisable at the time of purchase:

a) Irrevocable letters of credit with residual maturity of less than 3 months, bank deposits, commercial paper with no embedded derivative content or certificates of deposits. These should be issued by entities with a short term credit rating of at least F1 by Fitch Inc, Prime-1 by Moody's or A-1 by Standard & Poor's;

b) Securities where the entity is, or the issue has the benefit of a guarantee from, either a government, government agency, or supranational that has a minimum long term issuer rating of A by Fitch Inc, A by Moody's or A by Standard and Poor's (including such sub-categories or gradations therein);

c) Repurchase agreements on government securities in (b); or

d) Corporate debt securities rated at least A by Fitch Inc, A by Moody's or A by Standard & Poor's (including sub-categories or gradations therein).

7.2 For avoidance of doubt, asset backed securities, collateralised debt obligations, structured notes and other financial assets with embedded derivative content are not eligible assets for investment under paragraph 7.1 above.

7.3 The cash collateral obtained by the scheme or its agent should not be placed on deposit with, or invested in securities issued by, the borrower or its related entity.

7.4 The scheme should be satisfied that any investment of cash collateral by the scheme or its agent, will enable it to meet its repayment obligations.

7.5 The cash collateral should be invested by the scheme or its agent in a diversified manner by avoiding an excessive concentration of its investment, both at the entity level and at the instrument level. It should be managed prudently with appropriate limits and guidelines to manage related risks.

7.6 The eligible financial assets invested by the scheme or its agent should be held by a financial institution, subject to prudential supervision by a financial supervisory authority in its home jurisdiction.

7.7 The eligible financial assets invested by the scheme or its agent should not be pledged, given as guarantee or hypothecated.

Question 18: MAS seeks your views on the proposed safeguards to address risks associated with cash collateral reinvestments in securities lending.

h) Fund Liquidity Risk

1.5.12 Fund liquidity risk is the probability of loss due to securities lending affecting the scheme's overall liquidity and its ability to meet redemption obligations. We propose the following guidelines to address fund liquidity risk:

8 Fund Liquidity Risk

The scheme or its agent should ensure that the securities lending volume is kept at an appropriate level or that the scheme or its agent is entitled to terminate the securities lending arrangement and request the immediate return of its securities lent without penalty, in a manner that enables the scheme, to meet its redemption obligations. The scheme or its agent should also ensure that these transactions do not jeopardise the management of the scheme assets in accordance with its investment policy.

Question 19: MAS seeks your views on the proposed safeguards to address fund liquidity risk in securities lending.

i) Disclosure

1.5.13 Lastly, we propose that the following disclosures on securities lending be made:

9 Disclosure

9.1 The prospectus should disclose all securities lending programmes that it may participate in and clarify the purpose of these programmes, as well as the conditions and limits within which they are conducted. If the scheme intends to invest cash received as collateral, the scheme prospectus should specify the conditions and limits applicable to these investments. The prospectus should also contain a description of the inherent risks of the securities lending programme.

9.2 In its annual report, the scheme should disclose the total value of the securities lent, marked-to-market positions of non-cash collateral and the value and types of investments made with the cash collateral.

9.3 If the income from securities lending also accrues to the manager, the revenue sharing arrangement between the scheme and the manager should be disclosed in the prospectus. The revenue earned by the scheme and the manager arising from securities lending for the financial year reported should be disclosed in the annual report.

Question 20: MAS seeks your views on the proposed disclosure in respect of securities lending programmes.

1.6 Naming of Funds

Background

1.6.1 The Code does not currently prescribe any rules on the choice of fund names for non-specialised funds. Only money market funds, capital guaranteed funds and fund of funds are subject to specific naming guidelines. The Authority notes that there are instances where the names of funds do not reflect the investment objectives or nature of the scheme. This could mislead investors.

1.6.2 The Authority notes that in the United Kingdom, a scheme's name cannot be "undesirable or misleading". For instance, the name should not imply unjustified merits of the scheme or be inconsistent with its investment objective. Hong Kong requires a scheme to invest at least 70% of its non-cash assets in securities and other investments to reflect the particular objective or geographic region or market which the name of the scheme represents.

Proposals

1.6.3 The Authority is of the view that fund naming guidelines will enhance the quality of product labeling for retail schemes. The Authority considers that a manager's ability to manage a scheme in times of high market volatility or exceptional market conditions would be hampered if quantitative investment limits are imposed in relation to the fund name. We therefore propose not to set such limits. Instead, the Authority proposes to establish principles to guide the naming of funds. In general, the manager should adopt fund names that are clear and not misleading. The scheme's name should also reflect the scheme's investment geographical focus, asset type and sector focus, where applicable. The proposed guidelines for the naming of funds are as follows:

8 Fund Names

8.1 The name of the scheme, or a class of unit of the scheme, should not be undesirable or misleading. In determining whether a name is undesirable or misleading, the Authority will consider factors including whether the name:

a) is substantially similar to the name of another scheme;

b) implies that the scheme has merits which are not, or might not be, justified;

c) implies that the manager has particular qualities, which may not be justified;

d) is inconsistent with the scheme's investment objectives or approach;

e) implies that the scheme is not a collective investment scheme (for example, describing the scheme as a "plan" or "account");

f) might mislead investors into thinking that persons other than the manager are responsible for the scheme

8.2 The name of a scheme should reflect, where applicable, its:

a) geographical focus;

b) asset type; and

c) sector focus

that is in line with its investment objective, approach and investment universe.

Question 21: MAS seeks your views on the proposed fund naming guidelines.

II. STRUCTURED PRODUCT FUNDS

Background

2.1 Structured product funds play a specific role for investors with certain market views. These products can be tailor-made to generate a specific risk-reward profile that meets their investment needs. There is however a number of risks, including counterparty risks, potential conflicts of interest, illiquidity and lack of transparency in the valuation of the underlying investments that are more significant in structured products funds compared to traditional funds.

2.2 The Authority notes that under the UCITS framework, structured product schemes are subject to the same guidelines as those schemes which invest in financial derivatives. The United Kingdom follows a similar approach. In Hong Kong, the Securities & Futures Commission has recently proposed to tighten the investment guidelines for structured product funds.

Proposals

2.3 Structured product funds fulfill a niche in the array of investment products and would continue to remain relevant for some investors. Bearing in mind the risks that are more significant for structured product funds, the Authority considers that managers of such funds should highlight these risks prominently and explain how they intend to mitigate such risks in the prospectus. In addition, as the structurer, issuer and swap counterparty are often the same entity or related to one another, conflicts of interest may arise. This is especially true for structured products funds that invest substantially into a special purpose vehicle (or structured products issued by the special purpose vehicle) set up by the structurer. The Authority therefore proposes that the manager should also disclose in the prospectus how best execution is achieved.

2.4 Assuming the proposals set out in Chapter I on non-specialised funds are implemented as proposed, the Authority notes that structured product funds can be offered under the revised investment guidelines for non-specialised funds as under the current Code. The Authority considers that structured product funds should comply with the same rules as other non-specialised funds. The Authority will therefore remove Annex 1a of the Code, which currently provides for certain exceptions for structured product funds from the usual rules applicable to non-specialised funds. As a transitional measure, the Authority proposes that schemes that have been authorised as structured product funds should comply with the new rules within three months after the revised Code comes into effect. Existing authorised structured product funds with fixed maturity dates, however, will be grandfathered.

Question 22: MAS seeks your views on the proposals to:

(i) remove Annex 1a of the Code which provides for certain exceptions for structured products fund from the usual rules applicable to non-specialised funds; and

(ii) impose a transitional period of three months for authorised structured product funds, except those with fixed maturity dates, to comply with the revised investment guidelines for non-specialised funds

(iii) grandfather existing authorized structured product funds with fixed maturity dates.

III. INDEX FUNDS

3.1 General Indices

Background

3.1.1 There are no specific provisions in the Code to cater for schemes where the investment objective is to track an index. To better supervise these funds, we propose to establish criteria on the acceptability of an index for tracking purposes, as well as other requirements on such funds.

3.1.2 Index tracking is commonly done via four types of replication strategies, namely full replication, optimisation, sampling and synthetic replication. The full replication approach is to construct a portfolio that mirrors the benchmark index, so that the weights of the index constituents in the portfolio are almost identical to their weights in the benchmark. Optimisation is the technique of creating a portfolio which minimises the residual risk relative to a benchmark index. The resulting portfolio will hold fewer securities than the benchmark index but still closely tracks it by minimising tracking error and transaction costs. Similarly, the sampling approach means that the scheme does not hold each security in the same weight as the benchmark index, but mirrors the characteristics of the benchmark by creating buckets for each observed characteristic such as industry group, market capitalisation and the company domicile. Lastly, the synthetic replication approach involves the use of financial derivatives such as forwards, futures and swaps to replicate the returns of the benchmark index.

3.1.3 The Authority notes that Luxembourg, Ireland and Hong Kong have rules for funds that invest in indices. These rules include requiring that: (i) the index is diversified in that the price movements or trading activities regarding one component does not unduly influence the performance of the whole index; (ii) the index is investable such that it allows replication of the composition of the underlying assets of that index; (iii) the index is transparent and information on the underlying index such as the calculation methodology is readily accessible to the investor; and (iv) the index has a clearly defined objective or market sector that it aims to represent.

Proposals

3.1.4 The Authority proposes to establish guidelines for schemes where the investment objective is to track an index. The Authority also proposes to establish safeguards to address potential conflicts of interest which may arise where the manager is related to the index provider. The Authority notes that in the case where the synthetic replication technique is used, the scheme usually enters into a total return swap agreement with a single counterparty that is willing to provide the fund with the returns of the index in exchange for the returns on the portfolio's underlying assets. Although the technique gives rise to counterparty risks and risks relating to the usage of financial derivatives, these risks are addressed in Chapter I under the sections on 'Use of Financial Derivatives' and 'Counterparty Risks'. In view of the foregoing, the proposed new appendix on index funds is as follows:

Appendix 7: Index Funds

1 Definition

1.1 For the purposes of this Appendix, an index fund is one where the principal objective is to track, replicate or correspond to an index on equities, debt instruments or other securities, with an aim of providing or achieving investment results or returns that closely match or correspond to the performance of the index.

1.2 An index fund may seek to track an index by one of the following strategies:

a) Full replication by investing all or substantially all of its assets in the constituents of the underlying index, broadly in proportion to the respective weightings of the constituents in the index;

b) Optimisation approach by investing in a portfolio featuring high correlation to the index through minimising tracking error in relation to the index;

c) Sampling approach by stratifying or dividing an index into manageable risk elements (also called buckets) to replicate the underlying index performance; or

d) Synthetic replication through the use of financial derivatives to replicate the index performance.

2 Index Characteristics

2.1 The sampling and optimisation approaches where certain securities held by the fund are not constituent securities of the index may be used only if the resultant fund characteristics match the characteristics of the index.

2.2 The underlying index of an index fund should meet the following requirements:

a) It is sufficiently diversified as follows:

   i) It is composed in such a way that price movements or trading activities in one component do not unduly influence the performance of the whole index; and

   ii) It allows for a maximum weighting per entity of 20%, or for an index without entities (such as a currency or commodity index), a maximum weighting per constituent of 35%.

b) It is investable. The constituent securities should be sufficiently liquid (taking into account their respective weightings and trading volume), and may be readily acquired or disposed of under normal market circumstances and in the absence of trading restrictions;

c) It has a clearly defined objective, or the market or sector it aims to represent is clear;

d) It should measure the performance of a representative group of underlying in a relevant and appropriate way;

e) It appropriately reflects the characteristics of the market or sector it aims to represent. The index should reflect the price movements in its underlying constituents and change the composition and weightings of these constituents to reflect changes in the underlying market or sector. The index should be one which is revised or rebalanced periodically, based on methodologies that are publicly disclosed, to ensure that it continues to reflect the characteristics of the market or sector to which it refers; and

f) Information on the index is published in an appropriate manner, in that:

  i) the publication process is based on sound procedures on the collection of prices, and the calculation and publication of the index value. These procedures should include pricing procedures for index components where market prices are not readily available.

  ii) material information on matters such as index calculation, rebalancing methodologies and index changes is provided on a timely basis and widely accessible.

3 Reporting Requirements

3.1 The manager should notify the Authority immediately if the index is likely to cease, or has ceased to meet the requirements in paragraph 2.2. The manager should propose remedial actions or alternatives in its notification to the Authority.

3.2 Participants of the scheme should be notified of any significant events affecting or relating to the index as soon as practicable. These events include a change in the methodology for constructing or calculating the index, or a change in the objective or characteristics of the index.

4 Disclosure

4.1 The prospectus of an index fund should incorporate the following disclosures and warnings:

a) a description of the market or sector the index aims to represent;

b) a description of the characteristics and the general composition of the index, and where applicable, concentration in any economic sectors or entities;

c) a list setting out the weightings of the 10 largest constituent securities of the index as of a date within one month of the date of the offering document;

d) a statement to the effect that the investment of the scheme may be concentrated in the securities of a single entity or several entities, where relevant;

e) a warning on the manager's lack of discretion to fully adapt to market changes due to the inherent investment nature of index funds and that a drop in the index level is expected to result in a corresponding drop in the value of the scheme;

f) a statement to the effect that there is no guarantee or assurance of exact or identical replication at any time of the performance of the index;

g) a description of the circumstances that may lead to tracking errors, the related risks posed by such tracking errors and strategies employed in minimising such errors;

h) a description of the index methodology or rules, or the means by which investors may obtain such information (for example, by providing the website address of the index provider);

i) a description of the means by which investors may obtain information, including the latest updates on the index;

j) a warning that index composition may change and component securities of the index may be delisted, where relevant;

k) a description of any circumstances that may affect the accuracy and completeness in the calculation of the index;

l) a warning in relation to any licensing conditions (including indemnity given to the index provider, if any) for using the index, and the contingency plan in the event of cessation of the availability of the index; and

m) a statement on whether the index provider and the manager of the scheme (or its related persons) are independent of each other, and if not, the means by which possible conflicts of interests are addressed.

5 Use of Indices Constructed by Related Parties

Where the index provider and the manager are entities in the same group, effective arrangements, including the proper segregation of duties and responsibilities, should be put in place for the management of conflicts of interest.

6 Name of Scheme

The name of the scheme should reflect the nature of an index fund. The words "index", "tracking" or "tracker" should appear in the name of the scheme.

Question 23: MAS seeks your views on the proposed guidelines for index funds.

3.2 Hedge Fund Indices

Background

3.2.1 With the rapid growth in the hedge fund industry, there has been strong demand from investors for benchmarking and indexing tools on such funds. As a result, the number of hedge fund indices has grown significantly.

3.2.2 Hedge fund indices are fundamentally different from indices on traditional assets. Such indices incorporate inherent biases due to the way they are constructed. These inherent biases consequently affect the ability of hedge fund indices to fulfill some of the proposed index characteristics. These biases include:

- **Self-reporting bias –** There is a lack of objective standards in the selection of hedge funds to be included in hedge fund indices. In practice, index providers do not or cannot control the constituents of hedge fund indices as hedge fund managers can decide on whether to include or exclude specific hedge funds from a particular index. For example, some hedge funds may be excluded due to unsatisfactory performance.

- **Database selection bias –** As index providers have the discretion on whether to include or exclude certain strategies from their indices, the coverage of hedge funds in these indices can be significantly different from the actual hedge fund universe. In other words, the hedge fund index may not be representative of the universe it seeks to benchmark.

- **Survivorship bias –** This occurs when hedge fund indices include only surviving funds. Hedge funds that stop reporting to the index provider are excluded from the index. These funds may be closed for a variety of reasons, chief among which is poor performance which results in significant outflow of investor monies. This has the effect of creating an upward bias on indices' performances. However, survivorship bias can also be negative when some successful funds decide to stop reporting or when they decide to close their funds to new investors.

- **Back-fill bias –** This refers to the effect of adding a fund's historical performance data to the historical performance data of the index as this could significantly alter the performance of the index.

3.2.3 The Authority is of the view that the construction of most hedge fund indices exposes them to the above issues and that index providers have not established measures that would address these issues satisfactorily. Most hedge fund indices are partially made up of funds that are already closed to new investment, or will be closed at some point in the future once they reach their maximum capacity. Hence, a full replication (i.e. buying all components in the index) is often not feasible. Due to the lack of liquidity of the underlying funds arising from the existence of certain liquidity restrictions such as lock-ups or redemption notice periods, periodic rebalancing for hedge fund indices may not be possible. Most hedge fund indices are also not transparent since they do not disclose the constituent weights or construction methodology.

3.2.4 The Authority notes that in Europe, the Committee of European Securities Regulators ("**CESR**") has attempted to address the inherent biases associated with hedge fund indices by requiring safeguards on top of the general index acceptability criteria we proposed above.[3] These safeguards include requiring the hedge fund index to provide for the selection and re-balancing of components on the basis of pre-determined rules and objective criteria, and a qualitative overlay to assess the quality of the hedge fund index in respect of whether the index is investable and if the number of components in the index represents sufficient diversification. A hedge fund index will also not qualify as an acceptable index if the index provider accepts payments from hedge funds for their inclusion in the index, or where the methodology for constructing the index allows retrospective changes to previously published index values (i.e. 'back-filling'). To the extent that certain hedge fund indices meet the additional safeguards laid out by CESR, the Alternative Investment Management Association ("**AIMA**"), an industry body representing hedge funds and fund of hedge funds was of the view that these investable hedge fund indices are in reality more akin to funds of hedge funds.

<u>Proposals</u>

3.2.5 Despite the additional guidelines proposed by CESR, the Authority notes that certain inherent risks associated with hedge fund indices remain, primarily because of the nature of hedge fund indices themselves. Unlike traditional financial indices that comprise financial assets, hedge fund indices comprise managed funds. In addition, the construction of passive indices rests on the assumption that the strategies of its constituents are clearly defined. However, classification of strategy remains difficult for hedge funds given their diverse mandates. Hence the Authority proposes that funds should not be set up to track hedge fund indices.

Question 24: MAS seeks your views on whether funds should be allowed to track hedge fund indices.

[3] Committee of European Securities Regulators Level 3 Guidelines (CESR/07-434 dated July 2007)

IV. MONEY MARKET FUNDS

4.1 Credit Ratings

a) Existence of Multiple Credit Ratings

<u>Background</u>

4.1.1 Under the current money market fund guidelines, an eligible financial institution is defined to be a financial institution with either a specific minimum short term credit rating or a rating for which the manager has satisfied the trustee is comparable. As there are overlaps in the short term credit ratings used by the three rating agencies Moody's, Standard & Poor's and Fitch Inc., there is ambiguity where multiple credit ratings exist.

<u>Proposals</u>

4.1.2 The Authority proposes to amend the money market fund guidelines to clarify that in cases where multiple credit ratings exist and in the event of a difference in ratings by the rating agencies, the lowest credit rating should be used. The proposed formulation is as follows:

3 Definitions

c) For the purpose of this Appendix, an eligible financial institution is one which has a minimum short-term credit rating of Prime-2 by Moody's, A-2 by Standard and Poor's or F2 by Fitch Inc. Where multiple credit ratings exist and in the event of a difference in ratings by the rating agencies, the lowest credit rating should be used.

7 Single Entity Limits

7.4 For purposes of paragraphs 7.2 and 7.3, in the event of a difference in ratings by the rating agencies, the lowest credit rating should be used.

Question 25: MAS seeks your views on the proposal to amend the money market fund guidelines to clarify that in cases where multiple credit ratings exist and in the event of a difference in ratings by the rating agencies, the lowest credit rating should be used.

b) Short Term Ratings

<u>Background</u>

4.1.3 Currently, paragraph 7.1(a) of the money market funds guidelines states that not more than 10% of the deposited property of a money market fund should consist of obligations of the same party. Paragraph 7.3 states that the 10% single entity limit in paragraph 7.1(a) does not apply to securities issued or guaranteed by a government, supra-national agency or public authority where the securities (a) have received certain short-term ratings of A-1 by Standard and Poor's or F1 by Fitch Inc; or (b) have received only long term credit ratings and the ratings are at least AAA by Fitch Inc, Aaa by Moody's or AAA by Standard and Poor's. There is no inclusion of an equivalent short term rating from Moody's in paragraph 7.3(a).

Proposals

4.1.4 For completeness, the Authority proposes to insert the short term credit ratings of at least Prime-1 by Moody's into paragraph 7.3(a). The proposed formulation is as follows:

> 7.3 The 10% single entity limit in paragraph 7.1(a) does not apply to securities issued or guaranteed by a government, supra-national agency or public authority where the securities:
>
> a) have received short-term ratings of at least Prime-1 by Moody's, A-1 by Standard and Poor's or F1 by Fitch Inc; or
>
> b) have received only long term credit ratings and the ratings are at least AAA by Fitch Inc, Aaa by Moody's or AAA by Standard and Poor's (including sub-categories or gradations therein).
>
> Where multiple credit ratings exits and in the event of a difference in ratings by the rating agencies, the lowest credit rating should be used.

> Question 26: MAS seeks your views on the proposal to expand the short term ratings to include Moody's Investor Services.

4.2 Portfolio Maturities

Background

4.2.1 Money market funds typically aim to provide a return that is comparable to that of short-term deposits by investing primarily in high-quality short-term money market instruments, debt securities or short term deposits with well-rated financial institutions. The extraordinary redemptions and the seizure of the short-term debt markets experienced by U.S. money market funds during the recent financial crisis have prompted the Authority to review the money market fund guidelines, in particular on portfolio maturities.

4.2.2 The Code does not currently prescribe any rules on the overall portfolio maturity of a money market fund, although restrictions on the remaining term to maturity of individual investments are prescribed. The money market fund guidelines state that at least 90% of a money market fund's deposited property should be invested in investments with a remaining term to maturity of not more than 366 calendar days, and up to 10% in investments with a remaining term to maturity of up to 732 calendar days (the "**90/10**

restriction"). In contrast to Singapore, the U.S., Hong Kong and the UCITS framework requires money market funds to invest within a portfolio maturity limit. Unlike the 90/10 restriction, a portfolio maturity limit does not restrict the amount of investment a money market fund can make in individual securities as long as the overall portfolio maturity does not exceed the relevant threshold.

Proposal

4.2.3 Given the nature of money market funds as liquid investments, the Authority is of the view that a limit on the remaining term to maturity remains relevant and therefore the 732 days limit will be retained. The Authority further considers that having a portfolio maturity limit (as opposed to the 90/10 restriction) would better limit credit spread, interest rate spread and liquidity risks of a money market fund in volatile markets. A portfolio maturity limit would reduce the risk of the money market fund being exposed to greater price falls associated with medium term securities (as compared to short term securities) because the amount of medium term securities that a money market fund can hold would be dynamically limited.[4] The portfolio maturity limit would also serve to protect the portfolios of money market funds against liquidity risks by restricting excessive holdings of securities with extended maturities. This would allow money market funds to maintain sufficient liquidity for unanticipated redemptions.

4.2.4 The Authority therefore proposes that money market funds maintain a dollar-weighted average portfolio maturity limit of not more than 120 calendar days. The Authority believes that a 120-day dollar-weighted average maturity limit would provide money market funds the flexibility to offer exposure to a diversified portfolio of short term, high quality debt securities while strengthening resilience to market stresses. The proposed formulation is as follows:

6. Portfolio Maturity

6.1 A money market fund may invest in permissible investments with a remaining term to maturity of not more than 732 calendar days.

6.2 A money market fund should maintain a dollar-weighted average portfolio maturity that does not exceed 120 calendar days. The dollar-weighted average portfolio maturity should be calculated based on each security's remaining term to maturity and weighted based on the security’s market value.

6.3 "Remaining term to maturity" in the case of:

a) an investment in another money market fund, is the period of time within which the underlying money market fund is required to make payment upon redemption

[4] Medium term securities are generally more sensitive to credit spread than comparable short term securities as purchasers of medium term securities demand additional yield above a risk-free rate of return to compensate for the credit risk of the issuer. Correspondingly, the price of a medium term security can be expected to suffer a greater fall in response to a widening of credit spreads in times of market turbulence than a comparable short term security.

of units.

b) an investment in an instrument with a put option, is the period remaining to the exercise date of the option.

Question 27: MAS seeks your views on the proposal to introduce a dollar-weighted average portfolio maturity of 120 days for money market funds.

V. HEDGE FUNDS

5.1 Short Selling

Background

5.1.1 The current hedge fund appendix in the Code does not expressly prohibit physical short selling for retail hedge funds. In contrast, short selling is disallowed for non-specialised funds unless it arises from financial derivative transactions and exposures which are appropriately covered. This is because physical short selling entails additional settlement risk compared to similar exposures gained through financial derivatives.

5.1.2 The Authority notes that Luxembourg, Ireland and the United Kingdom restrict the short selling of securities. In particular, the UCITS framework prohibits uncovered sales of transferable securities. Uncovered sales would result in a scheme being exposed to the risk of having to buy securities at a higher price than the price at which the securities are delivered and thus making a loss, and the risk of not being able to deliver the underlying financial instrument for settlement. However, in the case where a scheme borrows a security, it is in a position to settle any delivery obligations from the short sale and is therefore deemed to be covered.

Proposals

5.1.3 The Authority recognises that hedge funds will continue to pursue strategies that involve taking short positions. However, owing to settlement risk, physical short selling will be disallowed. This treatment is in line with the position taken in the non-specialised funds guidelines. The Authority proposes to clarify in Appendix 4 of the Code on hedge funds that short selling of securities, whether or not backed by securities borrowing, is prohibited. The proposed formulation is as follows:

8 Short-Selling

The scheme should not engage in short-selling of securities, whether or not backed by securities borrowing. This prohibition does not extend to circumstances arising from financial derivative transactions as long as they are compliant with paragraph 4 of Appendix 1.

Question 28: MAS seeks your views on the proposal to prohibit hedge funds from short selling of securities, whether or not backed by securities borrowing.

5.2 Use of the term ‘Capital Protected’

Background

5.2.1 Following from the responses received to the public consultation paper on the *Review of the Regulatory Regime Governing the Sale and Marketing of Unlisted Investment Products* released in March 2009, the Authority will prohibit the term ‘capital protected’ and 'principal protected' and any other derivative or form of these terms in all offer documents, and marketing and advertising materials.

Proposals

5.2.2 For CIS, the Authority will put this prohibition into effect by removing references to these terms in the sections on 'capital protected' hedge funds and 'capital protected' fund of hedge funds. As explained in our September 2009 response to feedback received from the public, the prohibition is not intended to discourage the selling of products that are structured with the objective of returning full principal to investors at maturity. Such an objective may be stated without the use of the term 'capital protected' and managers should highlight to investors that these products do not unconditionally guarantee the return of their principal investments at maturity.

VI. CAPITAL GUARANTEED FUNDS ("CGF")

6.1 Credit Ratings

Background

6.1.1 The CGF guidelines states that an eligible guarantor should have, in the case of a financial institution, an individual rating of at least B by Fitch Inc., a financial strength rating of at least B by Moody's or a long term issuer credit rating of at least AA by Standard & Poor's. In other words, the financial strength rating from one rating agency may be used or the long term credit rating from another credit rating agency may be used. And where the guarantor is a Singapore-incorporated bank, no rating is required if the bank is approved under the CPF Investment Scheme to accept fixed deposits.

Proposals

6.1.2 The Authority proposes to amend the credit rating criteria for an eligible guarantor to use the long term credit rating as the common yardstick to determine its eligibility. The long term credit rating is a forward-looking opinion about an obligor's overall financial capacity to pay its financial obligations that have a maturity of more than one year. The credit rating focuses on the obligor's capacity and willingness to meet its financial commitments as they come due and provides an ordinal ranking of issuers based on the rating agency's view of their relative vulnerability of default. In contrast, the financial strength rating represents a credit rating agency's opinion of a financial institution's intrinsic safety and soundness. [5] It does not address the probability of default and the probability of timely payment. Instead, it is often used as a measure of the likelihood that a financial institution would require assistance from third parties. The financial strength rating is not meant to replace the long term credit rating but rather, to complement the traditional long term rating with additional information on the financial institution. The Authority notes that in practice, the fund management industry typically relies on the long term credit rating to monitor their counterparties.

6.1.3 We propose that a financial institution acting as guarantor should have a minimum long term credit rating of Aa by Moody's, AA by Standard and Poor's or AA by Fitch Inc. The exception for Singapore-incorporated banks (approved under the CPF Investment Scheme to accept fixed deposits) shall be removed as all three major local banks have credit ratings. And in cases where multiple credit ratings exist, the lowest credit rating should be used. The proposed formulation is as follows:

2 The Guarantor

2.1 Every capital guaranteed fund should have an eligible guarantor. For this purpose, an eligible guarantor should not be the issuer of securities which constitute more than 10% of the net asset value of the scheme. For this purpose, the issuer, its

[5] The term "Bank Financial Strength rating is used by Moody's, while Standard & Poor's uses the term "Bank Fundamental Strength rating" and Fitch Inc. uses the term "Bank Individual rating".

subsidiaries, fellow subsidiaries and holding company should be regarded as one entity. In addition, an eligible guarantor should have:

a) in the case of a financial institution, a minimum long term credit rating of Aa by Moody's, AA by Standard and Poor's or AA by Fitch Inc; or

b) in all other cases, a long term credit rating of AAA by Fitch Inc, Aaa by Moody's or AAA by Standard and Poor's (including such sub-categories or gradations therein).

In the event of a difference in ratings by the three rating agencies (Standard and Poor's, Moody's and Fitch Inc), the lowest credit rating should be used.

2.2 For the purposes of paragraph 2.1, where the long term credit rating of the guarantor:

a) falls but the minimum long term credit rating is A by Fitch Inc, A by Standard and Poor's or A by Moody's (including such sub-categories or gradations therein), no action need be taken; or

b) falls below those specified in (a) above or if the guarantor ceases to be rated, except as provided for in paragraph 3.8, the manager should within 6 months, or sooner if the trustee considers it to be in the best interest of the participants, enter into an agreement with a new guarantor which satisfies the rating criterion specified in paragraph 2.1. For this purpose, such new guarantee should, in the opinion of the trustee, provide the same level of guarantee to the participants as the original guarantee.

In the event of a difference in ratings by the three rating agencies (Standard and Poor's, Moody's and Fitch Inc), the lowest credit rating should be used.

Question 29: MAS seeks your views on the proposal to use the long term credit rating to determine guarantor eligibility.

VII. FUND OF FUNDS

7.1 Name of Funds

Background

7.1.1 A fund of funds is one where the investment objective is to invest all or substantially all of its assets with different fund managers to be managed on a dedicated basis or to be invested in pooled investments or schemes. For such funds, it may be cumbersome to comply with the proposed guidelines set out in the section 'Name of Funds'. For instance, a conservative multi-manager fund investing in various asset classes globally will have to be named "XYZ Global Conservative Balanced Multi-Manager Fund".

Proposals

7.1.2 The Authority proposes that any scheme which holds itself out as a fund-of-funds or a multi-manager fund has to include the term "fund-of-funds" or "multi-manager" in its name but need not reflect the scheme's investment geographical focus, asset type and sector focus. The scheme should also state clearly in its communication including marketing material that it is a fund-of-funds or a multi-manager fund. The proposed formulation in the Fund-of-Funds guidelines is as follows:

9 Name of Scheme

The name of the scheme need not comply with paragraph 8.2 of Appendix 1, but should include the term "fund-of-funds" or "multi-manager". The constitutive and marketing documents for the scheme should clearly set out that the scheme is a fund-of-funds or multi-manager fund.

Question 30: MAS seeks your views on the proposal for a fund-of-funds or a multi-manager fund to include the term "fund-of-funds" or "multi-manager" in its name but need not reflect the scheme's investment geographical focus, asset type and sector focus.

VIII. Operational Requirements

8.1 Sending of Accounts and Reports

Background

8.1.1 Currently, the Code requires trustees to send, or cause to be sent, the semi-annual and annual reports ("**Reports**") of the scheme to unitholders within a certain time frame. The Reports may be sent to unitholders by electronic means only if they have given consent to receive them in such a manner. With increased computer literacy and internet accessibility, the Authority is of the view that it would be timely to conduct a review of the explicit written consent requirement.

Proposals

8.1.2 The Authority proposes to allow trustees to send, or cause to be sent, the Reports to unitholders by electronic means. This takes into consideration increased familiarity of investors with the use of electronic media.[6] Not only would this result in cost savings and reduction in paper usage, investors can also expect to receive the Reports more promptly as compared with traditional mail.

8.1.3 To safeguard the interests of investors, the electronic communication should be transmitted to the email address provided by a unitholder for correspondence purposes. Alternatively, if the trustee chooses to make available the Reports by, for example, by posting them on a website, it should notify the unitholders via a hardcopy letter or by email to the email address provided by the unitholder for correspondence purposes, that the Reports are available and how they may be accessed. If a unitholder request a hardcopy of the Report within one month from the notification, it should be furnished within two weeks of the receipt of the request. Unitholders may also elect to receive all future Reports in hardcopies at any time. If the Reports are published on a website, the trustee should ensure that the most recent copies of the Reports are posted on that website for a period of 12 months from the date of posting on the website. Trustees who prefer to send hardcopy Reports can continue to do so. They may send the Reports by electronic means if unitholders so request.

8.1.4 The Authority has also taken into consideration that unitholders who are in the older age group, might not be computer literate and thus the Authority proposes that Trustees will be required to send hardcopies of the Reports to those who are aged 55 years and above as at a specified date. For example, if the specified date is 1 January 2010, all persons who are invested in a CIS or will be investing in a CIS, who are aged 55 years and above as at 1 January 2010, will be given a hardcopy of the Reports sent in that year and in future years. However, this group of unitholders should still be given the option of receiving softcopies of the Reports.

[6] A survey conducted by the Infocomm Development Authority of Singapore ("**IDA**") indicated that in 2009, 80% of Singaporean households had Broadband connection access.

8.1.5 The above-mentioned proposals will similarly apply to MAS Notice 307 in the sending of semi-annual and the annual audited reports to policyholders.

3.3 Sending of accounts and reports

b) The trustee should send, or cause to be sent, to participants –

i) the semi-annual accounts and semi-annual report relating to the scheme within 2 months from the end of the period covered by the accounts and report; and

ii) the annual accounts, report of the auditors on the annual accounts and annual report relating to the scheme within 3 months from the end of each financial year of the scheme.

Such accounts and reports may be sent or made available to participants by electronic means. If sent by electronic means, the account and report should be transmitted to the email address provided by the participant for correspondence purposes. If made available by posting on a website, the trustee should notify a participant by hardcopy or, if the participant had previously provided an email address for correspondence purposes, via email, that the account and report are available and how they may be accessed. The participants should be given the option to request for hardcopy accounts and reports within one month from the notification of the availability of the accounts and reports. The trustee should provide hard copies of the accounts and reports to any participant who requests for them within two weeks of the request, and participants should also be allowed at any time to opt for hardcopies for all future reports and accounts at no cost to them. For participants aged 55 and above as at [the specified date], hardcopies of the reports sent in that year should be sent unless they have given consent to receive the accounts and reports by electronic means. Such consent may be withdrawn at any time at no cost to them.

Accounts and reports that are made available to participants by posting on a website should remain posted for the next 12 months from the date of posting. Examples of electronic means include:

i) hardcopy letter or email to participants stating the URL link;

ii) email to participants with softcopy attachment; or

iii) hardcopy letter or email to participants with instructions on how to access the website to obtain the accounts and reports.

Question 31: MAS seeks your views on the proposals:

(i) to allow trustees to send, or cause to be sent, the accounts and reports to unitholders by electronic means; and

(ii) to require hardcopies to be sent to investors who are aged 55 and above at a specified date unless they have given consent to receive the accounts and reports by electronic means.

8.2 Transactions with Related Parties

Background

8.2.1 The Code prohibits the manager from investing the monies of the scheme in the manager's own securities or those of any of its related corporations. However, the manager of a scheme which is benchmarked against a widely accepted index constructed by an independent party and approved by the Authority may invest the monies of the scheme in the manager's own securities or those of any of its related corporations up to the weight of those securities in such index. The rule is intended to protect investors from the possible conflict of interest situations that may exist when the manager invests in shares of its related companies.

Proposals

8.2.2 In line with the exception allowed for schemes which track a benchmark under paragraph 2.2 of Appendix 1, it is proposed that managers be allowed to invest in the securities of the related companies up to the benchmark weight with an additional absolute overweight allowance of two percentage points above the benchmark weight. The leeway to overweight would allow managers flexibility to capture investment opportunities. The proposed formulation is as follows:

4.1 Functions and responsibilities

Transactions with related parties

e) The manager should not invest the monies of the scheme in the manager's own securities or those of any of its related corporations. For the avoidance of doubt, this prohibition does not extend to collective investment schemes managed by the manager or its related corporations. The manager of a scheme which is benchmarked against a widely accepted index constructed by an independent party and approved by the Authority may invest the monies of the scheme in the manager's own securities or those of any of its related corporations up to the weight of those securities in such index, with an additional absolute overweight allowance of two percentage points above the reference benchmark weight. The reference benchmark should comply with paragraph 2 of Appendix 7: Index Funds.

Question 32: MAS seeks your views on the proposal to allow managers to invest in the securities of related companies up to the benchmark weight with an additional absolute overweight allowance of two percentage points above the benchmark weight.

8.3 Valuation Error Reports

Background

8.3.1 The Code requires the manager to notify the Authority as soon as practicable when the manager becomes aware of an error in the calculation of a scheme's net asset value per unit. There is no prescribed format on the way the valuation error is to be reported, resulting in managers being unsure on the information to be submitted.

Proposals

8.3.2 The Authority proposes that managers submit a standardised valuation error report in the following format.

FUND VALUATION ERROR REPORT

1. State the name of the Fund affected by valuation error.

2. Describe the nature of the error (i.e. is it overvalued or undervalued) and state the magnitude of error as a percentage (%) of Net Asset Value (NAV).

3. Attach a calculation of the valuation error.

4. State how and when was the valuation error discovered.

5. Provide detailed reasons for the valuation error.

6. Name the parties responsible.

7. Provide the duration (i.e. time period) of the error.

8. State the total no. of subscribing investors during the period, if any.

9. State the total no. of redeeming investors during the period, if any.

10. State whether compensation is required. If yes, (i) state the amount of compensation to be paid to investors (if any) and the party who pays for the compensation; and (ii) state the amount of compensation to be paid to the Fund (if any) and the party who pays for the compensation.

11. Attach a calculation of the compensation to be made.

12. Describe the measures taken (or to be taken) to improve internal controls and prevent

similar incidents.

Question 33: MAS seeks your views on the proposed information to be submitted in the valuation error report.

IX. MISCELLANEOUS

9.1 Performance Fees

Background

9.1.1 Currently, there are no provisions in the Code on performance fees being charged by managers to the scheme.

9.1.2 The practice of charging performance fees has become widespread, driven mainly by schemes which use alternatives strategies, in particular hedge funds. A number of managers of retail schemes which operate in the traditional asset strategy space have also begun to charge performance fees. While performance fees incentivise managers to seek outperformance, it may also cause managers to take excessive risks which may not be in the best interest of unitholders. Further, schemes may charge performance fees that are not equitable to all investors especially if investors who enter a scheme at a later juncture are made to pay for performance achieved in an earlier period. Lastly, high performance fees charged by the manager would significantly erode the unitholder's return on investment.

9.1.3 In the United Kingdom, performance fees should be calculated and paid after consideration of all other payments. The benchmark or hurdle rate used as the basis for calculating performance fees should be reasonable given the investment objectives of the scheme. Further, the accrual period for performance fees should be reasonable and no arrangements should be made to adjust the price or value of sale or repurchase transactions in respect of performance fees accrued or paid if the transactions occur within the accrual period of the charge. The prospectus should contain the maximum amount or percentage of deposited property that the performance fee might represent in an annual accounting period with examples of the operation of the performance fee.

9.1.4 In Hong Kong, performance fees can only be payable no more frequently than annually, and only if the net asset value per unit exceeds the net asset value per unit on which the performance fee was last calculated and paid. This is commonly known as the high water mark method. In a recent consultation by the HK SFC, it was proposed that a performance fee may also be calculated with reference to the performance of a benchmark or an asset class. And in such a case, the performance fee is only payable upon outperformance of the net asset value per unit vis-à-vis that of the benchmark or asset class.

Proposals

9.1.5 The Authority proposes to introduce guidelines to standardise the methods used for calculating performance fees where the fund manager decides to impose such fees. In the event that performance fees are payable to the manager, either the fulcrum fee or high water mark method should be used.

9.1.6 A fulcrum fee is one that increases or decreases proportionately with the investment performance of the fund as compared to the specified benchmark. The use of the fulcrum fee arrangement will reduce the possibility of managers taking excessive risks to gain performance fees. While the usual performance fee charged does not penalise the manager when he underperforms, the fulcrum fee method would reduce the management fees if the manager underperforms. This disincentive would better align the interests of the manager with the unitholder. In addition, it is also proposed that the performance fee would be capped at the same rate as the management fee. Please see Appendix A for an illustration of the method.

9.1.7 The high water mark method ensures that the manager does not charge performance fees unless he has outperformed the highest net asset value achieved for the client at each point of calculating the performance fee. The high water mark arrangement ensures that performance fees can only be payable no more frequently than annually and only if the net asset value per unit/share exceeds the net asset value per unit on which the performance fee was last calculated and paid. This aligns the interests of the manager to that of the investor as the manager has to attain a higher level of performance in order to generate performance fees. In contrast to the fulcrum fee method, the Authority proposes that managers using the high water mark method should disclose in the prospectus, the cap on performance fees within each individual scheme in an annual accounting period, based on an amount or percentage of the net asset value of the scheme. A self-proposed cap would give managers the flexibility to devise a performance fee structure that is consistent with a scheme's investment strategy. Please see Appendix A for an illustration of the method.

9.1.8 An illustration of how the performance fee is calculated should be presented in a simple and clear manner in the prospectus. The prospectus should also state whether a performance fee can be levied even if the absolute return of the scheme is negative.

9.1.9 The proposed formulation is as follows:

9 Performance Fees

9.1 Any performance fee which is payable to the manager and charged to the scheme should be disclosed in the prospectus. The calculation of performance fees payable to the manager should be equitable to all investors. In addition, the following guidelines apply:

a) the performance fee should be calculated and paid after consideration of all other payments;

b) the performance fee should be calculated based on:

    i) a fulcrum fee; or

    ii) a high water mark method.

    Where a fulcrum fee method applies, the performance fee as a percentage of the NAV per unit of the scheme should be capped at the same rate as the management fee.

c) where it is made on the basis of performance of the scheme against any index or any other factor, the performance fee should be based on a benchmark that is reasonable given the investment objectives of the scheme and should be consistently applied;

d) the performance fee may be based on performance above a defined positive rate of return (the "hurdle rate"), which may be fixed or variable;

e) the period over which the performance fee accrues and the frequency with which it crystallises should be reasonable. At least one year is considered a reasonable period; and

f) there are to be no adjustments to the price or value of sale or repurchase transactions in respect of performance fees accrued or paid.

9.2 If a performance fee can be levied even if the absolute return of the scheme is negative, this should be clearly stated in the description of the performance fee.

9.3 The prospectus should contain the maximum amount or percentage of NAV that the performance fee might represent in an annual accounting period. This disclosure should be given in plain language together with examples of the operation of the performance fee.

Question 34: MAS seeks your views on the proposed guidelines for performance fees in the event where such fees are payable to the manager and charged to the scheme.

9.2 Definition of "Liquid"

Background

9.2.1 The Code does not contain a working definition of "liquid" in respect of a transferable security or financial derivative.

Proposals

9.2.2 In principle, the Authority is of the view that a transferable security or financial derivative should be sufficiently liquid to meet the redemption requests of unitholders. Currently, the Code prescribes that the redemption proceeds should be paid out to unitholders within T+4 business days for bond and money market schemes, T+6 business days for other types of schemes and up to T+7 business days for a scheme which invests all or substantially all of its deposited property in another scheme. The Authority proposes to deem a transferable security or financial derivative to be liquid if it can be converted into cash in no more than seven business days under normal market conditions.

Liquid: A transferable security or financial derivative is deemed to be liquid if it can be converted into cash in no more than seven business days under normal market conditions.

Question 35: MAS seeks your views on the proposed definition for 'liquid' in respect of a transferable security or financial derivative. In particular, do you agree with the proposed 7 business day timeframe? If not, would a principle-based definition be more appropriate for managers?

9.3 Back-testing and Simulated Performance Data

Background

9.3.1 In recent years, the Authority has received feedback from industry participants to consider allowing schemes, in particular those which have payouts and returns based on a specific pre-determined formula, to use back-testing and simulated performance data for disclosure of performance figures. There is currently no provision in the Code on the use of back-testing and simulated performance data. Under the Third Schedule of the Securities & Futures (Offers of Investments)(Collective Investment Schemes) Regulations 2005, the prospectus must not contain any information based on simulated past performance of a hypothetical scheme. The Authority also notes that the IMAS Code of Best Practices in Advertising Collective Investment Schemes and Investment-Linked Life Insurance Policies released by the Investment Management Association of Singapore, states that performance data should be actual and not based on simulated or hypothetical results.

9.3.2 The Authority notes that the regulations of some major overseas jurisdictions such as Luxembourg, Ireland, the United Kingdom and France allow the presentation of non-actual performance under restricted circumstances. The common principle is that the schemes should be passively managed and its strategy follows a fixed and pre-determined mathematical formula. The usage of the scenario analysis is permitted for structured funds such as formula funds and other comparable types of funds where there are no actual past performance available. The disclosures of these schemes are to include an illustration, depicting the best, worst and neutral scenarios, of the fund's potential performance.

9.3.3 In Hong Kong, the presentation of back-tested or simulated past performance is not permitted. Actual performance information, rather than those based on simulated results, must be used. Although hypothetical figures may be permitted for schemes with complicated mechanisms for the purpose of explaining those mechanisms to investors, figures used must be conservative and the worst-case scenario of the payout mechanism must be presented.

Proposals

9.3.4 The Authority is of the view that the use of back-tested or simulated past performance data may be subject to manipulation and managers may pick a desired performance period. Moreover, investors would find it difficult to understand the complex models used to derive the data. We would like to seek views on whether to allow the use of back-testing and simulated past performance data for disclosure of performance figures; and if so, under what conditions and circumstances.

Question 36: MAS seeks your views on whether to allow the use of back-testing and simulated performance data for disclosure of performance figures; and if so under what conditions and circumstances.

X. Investment-Linked Life Insurance Policies Sub-Funds

10.1 MAS Notice 307 makes reference to the application of the Code with regard to an investment-linked life insurance policy ("**ILP**") sub-fund. The proposed amendments to the Code will thus be applied to funds offered via an ILP. The Authority will continue to assess an application by an insurer to offer a particular sub-fund under an ILP based on the general principle that the particular sub-fund, or the underlying scheme into which the sub-fund feeds, would have been authorised or recognised by the Authority pursuant to sections 286 and 287 of the Securities & Futures Act.

XI. APPENDICES

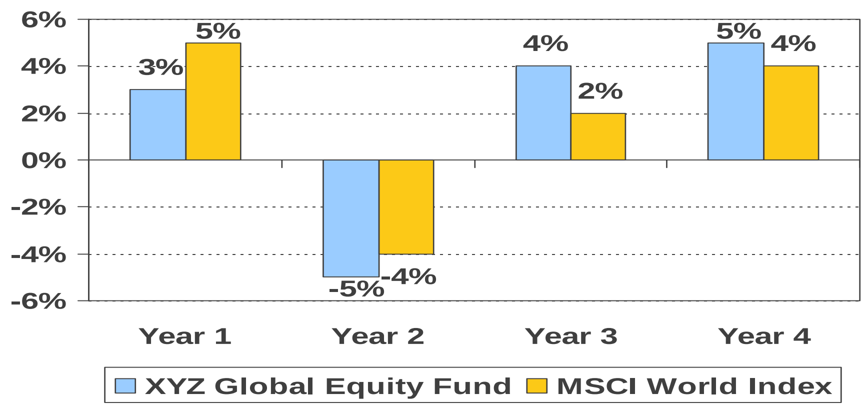
11.1 APPENDIX A: ILLUSTRATION OF PERFORMANCE FEES

a) Fulcrum Fee Method

11.1.1 A fulcrum fee arrangement is one where the total fees paid to a manager of a scheme increases or decreases proportionately with the investment performance of the scheme vis-à-vis the stated benchmark of the scheme. An example of how such a fee might work is presented below.

11.1.2 A scheme (e.g. XYZ Global Equity Fund) adopts the fulcrum fee arrangement for calculating its performance fees. The benchmark is the MSCI World Index and the hurdle rate is the return of the MSCI World Index. The scheme charges a management fee of 2% and a performance fee of 10%.

11.1.3 Assume the returns of the fund and benchmark over the next 4 years follows the chart below.



11.1.4 The calculations of both the management and performance fees are shown in the table below.

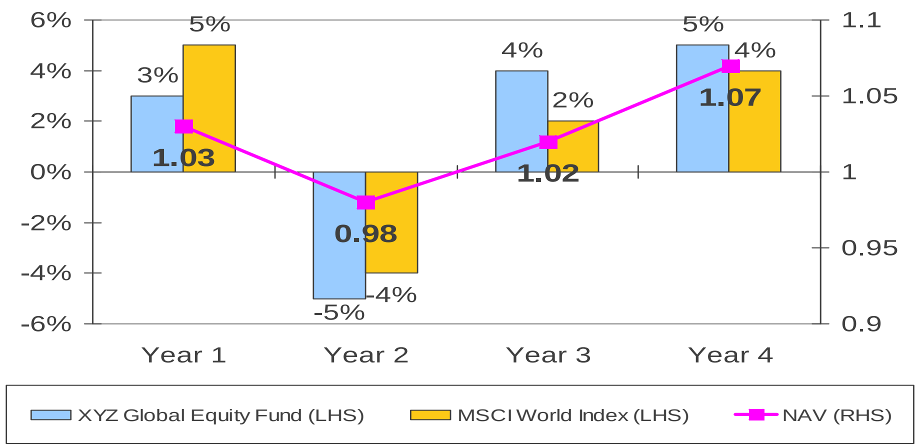
	Year 1	Year 2	Year 3	Year 4
Management Fee	2.0%	2.0%	2.0%	2.0%
Performance fee	(3 - 5)% x 10% = -0.2%	[(-5) - (-4)]% x 10% = -0.1%	(4 - 2)% x 10% = 0.2%	(5 - 4)% x 10% = 0.1%
Total fee	2.0% - 0.2% = 1.8%	2.0% - 0.1% = 1.9%	2.0% + 0.2% = 2.2%	2.0% + 0.1% = 2.1%

b) High Water Mark Method

11.2.1 In a high water mark fee arrangement, a performance fee can be charged if the current NAV per unit of the scheme exceeds the NAV per unit of the scheme on which the performance fees was last calculated and paid.

11.2.2 A scheme (e.g. XYZ Global Equity Fund) adopts the high water mark ("HWM") arrangement for calculating its performance fees. The scheme's benchmark is the MSCI World Index and its hurdle rate is the return of the MSCI World Index. The scheme charges a management fee of 2% and a performance fee of 10%.

11.2.3 Assume the returns of the fund and benchmark over the next 4 years follows the chart below.



11.2.4 The calculations of both the management and performance fees are shown in the table below.

	Year 1	Year 2	Year 3	Year 4
Above HWM?	HWM = 1.00, Yes	HWM = 1.03, No	HWM = 1.03, No	HWM = 1.03, Yes
Above Hurdle?	No	No	Yes	Yes
Performance Fee	None	None	None	(1.07 – 1.03) x 10% = $0.004
Management Fee	2.0% x 1.03 = $0.0206	2.0% x 0.98 = $0.0196	2.0% x 1.02 = $0.0204	2.0% x 1.07 = $0.0214
Total Fee	$0.0206	$0.0196	$0.0204	$0.004 + $0.0214 = $0.0254

For simplicity, the above examples assumed that management fees and performance fees are calculated based on year end NAV/unit.

11.2 APPENDIX B: LIST OF QUESTIONS

Question 1: MAS seeks your views on the proposal to introduce a list of permissible investments and the accompanying requirements. Specifically:

(i) Do you agree with the introduction of a list of permissible investments?

(ii) If so, do you agree with the accompanying requirements; and

(iii) If not, please explain and provide alternative suggestions.

Question 2: MAS seeks your views on the proposals to:

(i) limit a scheme's exposure to a single entity through investments in transferable securities of that entity to 10% of the net asset value of the scheme;

(ii) allow a limit of 20% for a scheme’s aggregate investments in or exposures to a group of entities through transferable securities, money market instruments, deposits and exposures to counterparty risk arising from OTC derivative transactions, repurchase agreements and securities lending;

(iii) allow the exposure to a constituent of a benchmark index that is (or is part of the same group as) a financial institution with which the scheme has placed deposits, to go up to its benchmark weight plus 2%, plus amount of deposits placed; and

(iv) set a cap on aggregate investments in or exposures to a group of entities of 25% of the net asset value of the scheme where the scheme invests in constituents of its benchmark index.

Question 3: MAS seeks your views on the proposals to:

(i) limit investment in shares to 10% of the total outstanding shares of a single entity and investment in debt securities to 10% of each individual issuance by a single entity where the issuance is not part of an MTN programme; and

(ii) impose a 20% limit per tranche, while maintaining an overall 10% limit on the aggregate exposure to an MTN programme.

Question 4: MAS seeks your views on the proposal to:

(i) require the lowest credit rating to be used where multiple credit ratings exist; and

(ii) impose a tighter single entity limit of 5% for non-investment grade corporate bonds.

Question 5: MAS seeks your views on the proposed principles to be applied to schemes that invest in financial derivatives and the method for calculating the scheme's exposure to specific financial derivatives based on the prescribed table.

Question 6: MAS seeks your views on the proposed guidelines on the VAR approach for calculating the exposure of a scheme to financial derivatives.

Question 7: MAS seeks your view on:

(i) the proposal for the manager to submit information on its risk management process to MAS for consideration when applying for the use of an alternative exposure calculation method for financial derivatives; and

(ii) the proposed information required in the risk management process document to be submitted to MAS.

Question 8: MAS seeks your views on the proposed prospectus disclosures in respect of financial derivatives.

Question 9: MAS seeks your views on the proposal to allow non-specialised schemes to invest in financial derivatives on commodities provided that the transactions are cash settled and sufficiently diversified.

Question 10: MAS seeks your views on the proposal to remove the guidelines on futures and options funds (i.e. Appendix 7) and currency funds (i.e. Appendix 8) in light of the proposals on the use of financial derivatives for non-specialised funds.

Question 11: MAS seeks your views on the proposals to:

(i) allow the manager to enter into an OTC financial derivative transaction with a counterparty which is a financial institution subject to prudential supervision in its home jurisdiction;

(ii) calculate the counterparty exposure by taking into account the replacement cost and the potential future credit risk;

(iii) allow reduction of counterparty exposure through the use of collateral which meets the proposed requirements; and

(iv) allow reduction of counterparty exposure through netting under the proposed circumstances.

Question 12: MAS seeks your views on the proposed scope of securities lending.

Question 13: MAS seeks your views on the proposal to allow schemes to lend securities directly, through recognised clearing systems or securities lending agents who are specialists in securities lending.

Question 14: MAS seeks your views on the proposals set out above to address counterparty risks in securities lending.

Question 15: MAS seeks your views on the safeguards proposed to address collateral deficiency risk in securities lending.

Question 16: MAS seeks your views on the safeguards proposed to address settlement risk in securities lending.

Question 17: MAS seeks your views on the safeguards proposed to address custody risk in securities lending.

Question 18: MAS seeks your views on the proposed safeguards to address risks associated with cash collateral reinvestments in securities lending.

Question 19: MAS seeks your views on the proposed safeguards to address fund liquidity risk in securities lending.

Question 20: MAS seeks your views on the proposed disclosure in respect of securities lending programmes.

Question 21: MAS seeks your views on the proposed fund naming guidelines.

Question 22: MAS seeks your views on the proposals to:

(i) remove Annex 1a of the Code which provides for certain exceptions for structured products fund from the usual rules applicable to non-specialised funds; and

(ii) impose a transitional period of three months for authorised structured product funds, except those with fixed maturity dates, to comply with the revised investment guidelines for non-specialised funds.

(iii) grandfather existing authorized structured product funds with fixed maturity dates.

Question 23: MAS seeks your views on the proposed guidelines for index funds.

Question 24: MAS seeks your views on whether funds should be allowed to track hedge fund indices.

Question 25: MAS seeks your views on the proposal to amend the money market fund guidelines to clarify that in cases where multiple credit ratings exist and in the event of a difference in ratings by the rating agencies, the lowest credit rating should be used.

Question 26: MAS seeks your views on the proposal to expand the short term ratings to include Moody's Investors Services.

Question 27: MAS seeks your views on the proposal to introduce a dollar-weighted average portfolio maturity of 120 days for money market funds.

Question 28: MAS seeks your views on the proposal to prohibit hedge funds from short selling of securities, whether or not backed by securities borrowing.

Question 29: MAS seeks your views on the proposal to use the long term credit rating to determine guarantor eligibility.

Question 30: MAS seeks your views on the proposal for a fund-of-funds or a multi-manager fund to include the term "fund-of-funds" or "multi-manager" in its name but need not reflect the scheme's investment geographical focus, asset type and sector focus.

Question 31: MAS seeks your views on the proposals:

(i) to allow trustees to send, or cause to be sent, the Reports to unitholders by electronic means; and

(ii) to require hardcopies to be sent to investors who are aged 55 and above at a specified date unless they have given consent to receive the Reports by electronic means.

Question 32: MAS seeks your views on the proposal to allow managers to invest in the securities of related companies up to the benchmark weight with an additional absolute overweight allowance of two percentage points above the benchmark weight.

Question 33: MAS seeks your views on the proposed information to be submitted in the valuation error report.

Question 34: MAS seeks your views on the proposed guidelines for performance fees in the event where such fees are payable to the manager and charged to the scheme.

Question 35: MAS seeks your views on the proposed definition for 'liquid' in respect of a transferable security or financial derivative. In particular, do you agree with the proposed 7 business day timeframe? If not, would a principle-based definition be more appropriate for managers?

Question 36: MAS seeks your views on whether to allow the use of back-testing and simulated performance data for disclosure of performance figures; and if so under what conditions and circumstances.

Question 37: MAS seeks your views on the proposal to give fund managers and approved trustees for CIS three months to comply with the revised Code.

Monetary Authority of Singapore