OECD/IOPS GOOD PRACTICES ON PENSION FUNDS' USE OF ALTERNATIVE INVESTMENTS AND DERIVATIVES

DECEMBER 2011

For further information please contact:

OECD: Mr. Juan Yermo [Tel: +33 145 24 96 62; Email: juan.yermo@oecd.org], or

IOPS: Ms. Fiona Stewart [Tel: +33 145 24 14 52; Email: fiona.stewart@oecd.org].

OECD/IOPS GOOD PRACTICES ON PENSION FUNDS' USE OF ALTERNATIVE INVESTMENTS AND DERIVATIVES

Introduction

1. The financial and economic crisis of 2008/2009 heightened the concern of pension regulatory and supervisory authorities regarding pension funds' use of alternative investments and derivatives. [1] Though suffering less of a direct impact from the financial crisis in general and from such instruments in particular than other financial sectors, pension fund regulators and supervisors raised concerns that the pension funds which they oversee did not understand the products they were investing in, or have the necessary risk management systems to cope with them.

2. As previously outlined by the IOPS and OECD, there is no clear-cut definition of alternative investments. The concept is of a dynamic and ever-evolving nature, and closely linked to the development of financial markets. In practice, alternative investments are characterised by properties that distinguish them from traditional investments (stocks, bonds, cash or property), such as: the application of innovative financial products and derivatives; the use of extensive leverage; illiquidity of underlying investments; a greater reliance on the skill of the manager and the absence of a meaningful performance benchmark.

3. At this stage, a non-exhaustive list of commonly agreed types of alternative investments would typically include: hedge funds; private equity; structured products, securitised real estate investments; etc. The different characteristics of alternative investments have implications for their risk profile. Key issues that are typically more relevant for alternative investments and that may need to be addressed in a pension fund's risk management are: liquidity risk; integrity risk; operational risk; limited transparency; valuation weaknesses; control issues and conflicts of interest. Many of these investments are complex with non-linear risks and can have dangerous 'tail-properties.' Analysing these risks, when it is quantitatively possible, often requires sophisticated methods.

4. Regulatory and supervisory authorities generally recognise the need for a diversified investment strategy. Alternative investments can provide the opportunity to better manage or lower overall portfolio risk by proper diversification of (low correlation) assets, and allow pension funds, as long term investors, to benefit from the illiquidity premium that may be associated with less liquid instruments. They can also provide more efficient investment mechanisms for gaining exposure to certain assets and to thereby allow for the possibility to improve the risk-adjusted return of their investment portfolio.

5. However, pension fund regulatory and supervisory authorities recognize that riskier strategies are often inherent in alternative investments, given that some were initially designed for high-net worth individuals (with a consequent high risk tolerance). Such investments may be complex, illiquid or opaque, and therefore require careful scrutiny and analysis, and in many cases, more rigorous review and monitoring than most traditional products (particularly in times of volatility when correlations and other assessments may change). They also tend to be more expensive to manage than traditional investments. For smaller pension funds, or more generally funds that do not have well-developed internal investment and risk management teams, delving into alternatives often requires the use of fund of funds which, although

[1] For OECD definition of derivatives and hedge funds see

http://www.oecd.org/glossary/0,3414,en_2649_34115_1968510_1_1_1_1,00.html#1967419

they may provide a higher degree of diversification, adds another layer of cost. Exposure to alternative investments is therefore still limited for pension funds in some jurisdictions.[2]

6. Derivatives are financial contracts whose price is determined by the value of an underlying asset, commodity, rate, index or event. The basic types of derivative contracts are forwards, futures, options, swaps, and swaptions (an option on a swap). Derivatives can also be classified along three main criteria. First, there are some derivatives - like standardised futures and options - which are traded on an exchange like any other financial asset, while others - like swaps - are traded on the over-the-counter (OTC) market. A second, related classification of derivatives concerns their degree of complexity. Basic types are known as plain vanilla products. The more complicated derivative structures (which are always traded on the OTC market) are known as exotic derivatives. These tend to be option-based contracts (exotic options). Derivatives can also be classified according to the type of underlying asset (e.g., equity derivatives, foreign exchange derivatives, interest rate derivatives, commodity derivatives or credit derivatives).

7. Derivatives can be used for various purposes by long-term investors such as pension funds – most notably as a substitute for direct investment in the underlying asset (because of liquidity, market timing, tax or other reasons) and risk control. Derivatives can also be used to change the characteristics of their portfolio investments (such as the duration of their fixed income portfolio). They can also be used for risk control or hedging, duration control and general portfolio / exposure management.

8. However, derivatives can also be used for other purposes, including speculation[3] and leveraging of portfolios, which can come into conflict with the basic objectives of a pension fund. While derivatives and, more generally, leveraging can have return-enhancing properties on investment portfolios, their use for this purpose can also expose pension funds to major losses in adverse scenarios as the multiplier effect of leveraging on returns reverses. Two additional major risks with the use of derivatives are market transparency and counterparty risk (particularly evident in the case of OTC derivatives, where there is no central exchange to collate and disseminate pricing information and to act as intermediary, ensuring adequate posting of capital and collateral). For these reasons, regulations in most jurisdictions restrict pension funds' use of derivatives (e.g. allowing them to be used for hedging purposes but not for speculation).

Scope and Coverage

9. In 2008, the International Organisation of Pension Supervisors (IOPS) approved a set of '*Good Practices in the Risk Management of Alternative Investments by Pension Funds',* designed to provide guidance to pension funds as to what sort of risk management arrangements pension supervisors expect pension funds using these products and instruments to have in place. The Organisation of Economic Cooperation and Development (OECD) produced a set of '*Guidelines on Pension Fund Asset Management'* in 2006. The two Organisations then jointly surveyed their members in 2010 to investigate the current regulatory practice regarding alternative and derivative investments, market practice and the state of risk-management pension funds employ in relation to these instruments.[4] These revised good practices stem from this survey and are intended to update and develop the previous IOPS/ OECD guidance relating to pensions funds' use of alternative investmentsand derivatives. They also draw on the

[2] See IOPS Working Paper No. 13, *'Pension Funds'' Use of Alternatives and Derivatives: Regulation, Industry Practice and Implementation Issues'*

[3] Speculation in this paper is taken to mean transactions involving unusual and considerable levels of risk which intend to take advantage of short-term market moves for commensurate levels of gain (as opposed to investments which are normally longer-term transactions based on fundamental analysis).

[4] See footnote 2

'IOPS Principles of Private Pension Supervision' the International Association of Insurance Supervisors (IAIS) *'Supervisory Standard on Derivatives' (NB currently under revision)*, as well as the work of the Basel Committee on Banking Supervision.

10. The Good Practices reflect what pension regulatory and supervisory authorities usually expect to examine when assessing the risk management of pension funds that use alternative investments and derivatives.[5] The Good Practices outline how supervisors should oversee such investments and suggest possible regulatory controls. The character of the Good Practices emphasizes the overriding principle that it is the responsibility of pension funds to develop their own alternative investment and derivatives policies in a responsible manner. As such, the Good Practices may also help and encourage pension funds to improve their risk management practices and thereby use these instruments safely and effectively.

11. Difference in language reflects the fact that some of the Good practices are based on previously agreed recommendations. The language used in Good Practice 6 is consistent with the IOPS Principles, which address supervisors directly.

12. Despite country-specific situations and supervisory approaches, the OECD and IOPS believe that general Good Practices relating to pension funds' use of alternative investments and derivatives can be identified, and will be helpful to IOPS and OECD members in the supervision of their pension systems. Although these Good Practices therefore serve as a benchmark reference for all countries or jurisdictions, the question of how to best apply them in practice should take into account country-specific conditions and circumstances, including the extent to which regulations permit the use of such investments.

13. These Good Practices cover the regulation and supervision of private pensions, including both work-based occupational pensions and personal private pensions.[6] Though mainly referring to pension funds and pension plans,[7] a range of other market participants may be involved (such as plan sponsors or

---

[5] It should be noted that the Good Practices may not be applicable in full to contract-type pension plans due to the different governing structure. The application of the standards may also need to be adapted for smaller pension funds.

[6] In EU countries, the guidelines may not apply to those pension funds and pension plans that fall outside the scope of the EU Directive 2003/41/EC of the European Parliament and of the Council of 3 June 2003 on the activities and supervision of institutions for occupational retirement provision, e.g. pensions funded via book reserves.

Though these guidelines apply to private pension funds, it may also be considered good practice to apply similar standards to government funds.

[7] According to the OECD's taxonomy, a pension fund is a legally separated pool of assets forming an independent legal entity that is bought with the contributions to a pension plan for the exclusive purpose of financing pension plan benefits. The plan/fund members have a legal or beneficial right or some other contractual claim against the assets of the pension fund. Pension funds take the form of either a special purpose entity with legal capacity (such as a trust, foundation, or corporate entity) or a legally separated fund without legal capacity managed by a dedicated provider (pension fund Management Company) or other financial institution on behalf of the plan/fund members.

A pension plan is a legally binding contract having an explicit retirement objective (or – in order to satisfy tax-related conditions or contract provisions – the benefits cannot be paid at all or without a significant penalty unless the beneficiary is older than a legally defined retirement age). This contract may be part of a broader employment contract, it may be set forth in the plan rules or documents, or it may be required by law. In addition to having an explicit retirement objective, pension plans may offer additional benefits, such as disability, sickness, and survivors' benefits.

financial institutions serving as external service providers). The pension supervisory authority refers to the institution (mostly governmental agencies), which is empowered to supervise and oversee pension funds. It is noted that in some countries this authority is a separate agency, while in many other countries it is integrated with the oversight of other financial activities into a single supervisory body.

REVISED IOPS/ OECD GOOD PRACTICES ON PENSION FUNDS' USE OF ALTERNATIVE INVESTMENTS AND DERIVATIVES

Part I Pension Funds' Risk-management of Alternative Investments and Derivatives

1. Investment policy & Risk Management Strategy

GP 1a: Pension funds' investment policy statements and risk management strategies need to explain whether, why, to what extent and how alternative investments and derivatives will be used.

GP1b: Pension funds have the responsibility to conduct adequate, proportional risk-management for alternative investments and derivatives.

GP 1c: All significant risks relating to the pension fund's alternative investments and derivatives need to be measured and integrated into the pension fund's risk management system.

GP 1d: Pension funds will check at regular intervals that diversification across the overall investment strategy is adequate and that undesirable concentrations of risk in the portfolio as a result of alternative investments and the use of derivatives are avoided.

GP 1e: Pension funds need to control their global positions in underlying assets plus derivatives, monitor global results, and adjust their risk exposure in accordance with their investment policy and risk management strategy.

GP 1f: Pension funds may use risk limits as a means to control exposures to the various risks associated with derivative activities. Limits will be compatible with the investment purpose of the derivative, the nature of the pension fund's strategies, risk measurement systems, and risk tolerance.

Annotations

1.1 Pension funds need to conduct adequate risk management when using alternative investments and / or derivatives and to comply with any statutory provisions (including local regulations which may restrict investments in or through such instruments).[8] All significant risks relating to the pension fund's use of alternative investments and derivatives need to be measured and integrated into the pension fund's risk management system. The primary components of a sound risk management process for alternative investments and derivatives would normally include written policies and procedures that: clearly delineate lines and/or responsibility for risk-management; set in place adequate systems for measuring risk; create appropriately structured limits on risk taking; prescribe comprehensively and timely risk monitoring and reporting; establish effective independent internal controls; and are made known to all staff dealing with alternative investments and derivatives. These documents need to be reviewed regularly. Given the

[8] In particular the OECD *'Guidelines on Pension Fund Asset Management'* require pension funds to establish a sound risk management process that measures and seeks to appropriately control portfolio risk, and to manage assets and liabilities in a coherent and integrated manner

complexity of the products involved and the speed of financial innovation, a review should be carried out at least annually.[9]

1.2 Pension funds need to decide in advance the return and risk characteristics of investments in which they wish to invest, including the extent of risk spreading, making the decision within the framework of the strategic investment policy. The selection process with regard to alternative investments will also be in line with the strategic investment policy of the fund. The investment policy statement and risk management strategy need to reflect on how the pension fund's investment in alternative assets fits with the pension fund's overall investment and risk management strategies, due account being taken of the pension fund's total risk profile, including the relation between alternative investments on the one hand and the total investment portfolio and the nature and size of the liabilities on the other hand. The divergent characteristics of alternative investments need to be given due consideration through the use of suitable infrastructure (e.g. capacity, systems). Risk analysis provides a basis to decide whether alternative investments fit with the nature and size of a pension funds' liabilities. The assessment of risks will consider the specific characteristics of alternative investments, e.g. by applying appropriate stress testing procedures (which form part of standard controls for pension funds investing in alternative assets or using derivatives) and the correlations between these investments and other asset classes. Other aspects that play a role in strategic investment choices include not only the investment structure (fund of funds or own management), required liquidity and costs, but also the required knowledge level (which may be obtained in part from external parties).

1.3 When using alternative investments, specific reference needs to be made within pension funds' investment policy statements to the types of products the fund intends to invest in (and those not allowed),the general asset allocation within the different types of Alternative Investments (including percentage of total portfolio limits – if appropriate), the inherent risk of such products and the general level of risk allowed (including maximum leverage, if appropriate), their expected volatility and liquidity and how they will be valued. How these investments are valued is of particular importance and the governing body of the pension fund therefore has an important role to play in establishing a strong valuation process for alternative investments which are not readily tradable on an established market, and oversight of how values are periodically and on request determined, with the use of independent valuation advisors where necessary. Pension funds' risk-management statements would also be expected to specifically mention how alternative investments will be handled.

1.4 When a pension fund intends to use derivatives, specific reference to the derivatives policy needs to be made within pension funds' investment policy statements. Such a policy would identify the main use of derivatives (whether for substitution, risk control/ hedging or arbitrage), how they will be valued and monitored and an estimated maximum potential loss and its reference within an asset/liability context.

1.5 Sufficient diversification of the investments is essential, both within the total portfolio and within the portfolio of alternative investments. Illiquid portfolios can often move in concert in certain stress events. Such common exposures might not be picked up in normal mean-variance analysis. Pension funds would be expected to consider their exposure on a total portfolio level, across all asset classes (e.g. counterparty exposure, exposure to non-investment grade assets etc.). Concentration of exposures which arise through the use of derivatives (e.g. counterparty exposures) also need to be taken into account.

1.6 Accurate measurement of risks related to alternative investments and derivative positions is necessary for proper monitoring and control. The risk management strategy needs to incorporate the various risks (e.g. market risk, counterparty or credit risk, leverage) that are specific to these instruments

[9] Further details of pension funds risk management systems can be found in the '*OECD/ IOPS Good Practices for Pension Funds' Risk Management System'*

and lay out a framework for monitoring and controlling them. Liquidity risk, in particular, will require additional focus in relation to these assets. The sophistication and precision of risk measurement methods varies by the types, volumes, and riskiness of the activities.

1.7 In addition to prudent investment rules and risk management requirements, pension funds may wish to use risk limits to control their derivative exposure. As well as setting risk limits, a series of concrete steps to reduce risk exposure exceeding these limits needs to be stipulated in the investment policy statement and risk management strategies.

2. Internal Governance

GP 2a: The pension fund's governing board[10] *needs to ensure that it has sufficient understanding of the strategy and risk of its investment policy and adequate resources in place (both human and systems technology) before it decides to use alternative investments and derivatives.*

GP 2b: Senior management should establish a clear selection process and written operational policies and procedures for implementing (and exiting from) the alternative investment and derivatives policy set by the governing board, for either direct management of alternative investments or selecting third-parties to do so on behalf of the pension fund.

GP 2c: The pension fund's independent risk control and audit functions need to ensure compliance with the pension fund's policies on alternatives investments and derivatives usage and to report regularly to the pension fund's governing board.

GP 2d: All individuals conducting, monitoring, controlling and auditing alternative investments and the use of derivatives should be suitably qualified and have appropriate levels of knowledge and experience in the specific matter.

Annotations

2.1 The governing board of a pension fund, as the ultimate decision-maker, determines the fund's investment policy including the portfolio allocation to alternatives and the fund's policy on derivatives. In order to take such decisions, it needs to have sufficient understanding of the overall strategy and risks involved and to be able to evaluate any external advice received.

2.2 When directly investing in alternatives or using derivative products, the governing board also needs to ensure both the fund's in-house fund managers and executives have appropriate qualifications and expertise to carry out their designated tasks with respect to the management of alternative investments and derivatives positions. Such products may also call for specific monitoring and systems technology. The governing body needs to verify that such resources are properly in place before implementing a policy on alternatives and derivatives.

2.3 The governing board needs to ensure that the reporting and internal control systems are designed to monitor that alternative investments and derivatives are being used in accordance with the stated objectives and strategy and legal and regulatory requirements. The governing board needs to ensure that: a compliance procedure exists within the investment process that verifies and ensures that any alternative investments made comply with the Investment Policy, as well as the standardized analysis and standardized authorization procedures; they receive regular information (at least quarterly) on risk

[10] In a two-tier board system, involving a managing board and a supervisory board, the body which is responsible for all strategic decisions (usually the managing board) is considered the governing board.

exposure and derivatives usage in a form which is understood by them and which permits them to make an informed judgement as to the level of risk on a mark to market basis; the systems provide accurate and timely information on risk exposure and derivatives positions and are capable or responding to ad hoc requests; they approve the internal control procedures relating to alternative investments and the use of derivatives; and the internal controls – such as the organisational and reporting structure – support the separation of key functions (including an adequate segregation of the responsibilities for measuring, monitoring and controlling alternative investments and derivatives from those conducting day to day derivatives transactions) and adequate accountability of decisions.

2.4 Senior management need to establish clear and written operational policies and procedures for implementing the derivatives policy set by the governing board. Their responsibilities include specifying lines of responsibility for managing risk, adequate systems for measuring risk, appropriately structured limits on risk taking, effective internal controls and a comprehensive risk-reporting process.

2.5 The risk control and / or audit functions play a critical role in monitoring investments and risks associated with alternative investments and derivatives. They need to be independent. A direct reporting line between these functions and the governing body is of paramount importance for addressing any major risks in the fund's alternatives investments and derivatives positions. A comprehensive internal audit will include the coverage of derivatives activities and ensure timely identification of internal control weaknesses and operating systems deficiencies.

2.6 Where transactions are handled internally by the pension fund, adequate systems of internal controls need to be in place and operating to ensure that alternative investments and derivatives are properly supervised and that transactions have been entered into only in accordance with the pension fund's authorised policies and procedures. The extent and nature of internal controls adopted by each pension fund will differ but will include: reconciliations between front/ back office and accounting systems and with brokers; procedures to ensure all parties to a transaction agree with the terms of the deal; procedures for promptly sending, receiving and matching confirmations (independent from the front office function); procedures to ensure that formal documentation is completed promptly; procedures to ensure that positions are settled and reported and that late payments or receipts are identified; and procedures to ensure the independent checking of rates or prices.

2.7 As well as being suitably qualified, compensation policies need to be carefully designed to ensure that staff with responsibilities for alternative investments and derivatives do not have misaligned incentives, introducing conflicts of interest which could lead them to act contrary to the interests of the pension fund's members and beneficiaries.[11] 3. Due Diligence of External Asset Managers

GP 3a: When investing in collective alternative investment vehicles, the understanding of the pension fund's governing board needs to be supported by analysis at regular intervals of the risk profiles of the investment strategies and the capacities of the managers of the funds in which the pension fund has invested or intends to invest. An analysis based on timely and sufficient information about the funds and their managers is required so that an independent assessment can be made.

GP3b: Due diligence needs to be applied before pension funds invest in alternative investments focusing on the people, processes and performance of either the external manager to whom the pension fund gives a mandate, or to the collective alternative investment fund in which the pension fund is planning to invest, with particular attention paid to the valuation of assets and associated costs.

[11] For further details on conflicts of interest see '*OECD Guidelines on Pension Fund Governance'*

GP 3c: The alternative investment mandates given to external managers need to be based on adequate contract terms. Compliance with contract terms needs to be monitored regularly and systematically by pension funds.

Annotations

3.1 Pension funds invest in alternative instruments via external managers in two ways. Either the pension fund invests in a collective investment vehicle, such as a hedge fund (or fund of hedge funds). Alternatively, the pension fund gives a mandate to an external manager to handle its exposure to these assets. In either case the ultimate responsibility for the strategy and investments lies with the pension fund's governing body and suitable oversight processes need to be in place.

3.2 The due diligence investigation is the most important process stage with regard to investments in alternatives, whether giving external mandates or investing in pooled funds, not least because it enables those concerned to confirm whether their understanding is correct. Extensive due diligence checks are needed for alternative investment funds due to the fact that they lack transparency and may be subject to little, if any, supervision. Pension funds need to receive regular and timely reports on these collective investment funds, including details on the investments underlying (funds of) funds (i.e. look through principle should apply).

3.3 The points of attention in the due diligence process can be broadly divided into three: people, processes and performance. The assessment of people looks at both management and staff, key aspects being integrity risk and expertise of the management team. The assessment of processes looks at factors such as the operational and risk management processes, the investment process (including the degree of leverage) and the processes surrounding any outsourcing to third parties, including the use of appropriate systems and the availability of contingency plans. An assessment of performance should include an assessment of the way in which the fund valuation is effected and, to the extent possible, an analysis of the management's track record. The independent risk management team of the pension fund should play a part in the due diligence process, including verifying that the proposed investments fit with the investment policy.

3.4 A key issue to be addressed in the evaluation of a pension fund's due diligence and monitoring processes in regards to collective alternative investment funds is whether proper attention is paid to valuation. Pension funds need to assess the extent to which valuations are being produced independently and how this independence is maintained. Considerations include amongst others: (the appropriateness of) the valuation methodology used, validation and back-testing procedures surrounding pricing models, independent verification and the frequency of valuations.

3.5 If a pension fund participates in funds of funds (i.e. an investment fund which itself invests in several distinct sub-funds), then the due diligence process considers several additional aspects, arising from the introduction of an additional management layer. Any assessment of funds of funds will include a judgement of the quality of risk management conducted by the fund of funds manager and the standards and criteria of conduct observed.

3.6 The existence of side letters, offering preferential terms to certain investors, may significantly impact the risk profile of the investment. Therefore it is important for pension funds to make sure that their investment managers do not offer these facilities or that they are properly disclosed and compensated. This will be reflected in contract terms.

3.7 Alternative investments cannot be regarded as passive investments. In order to ensure optimal operational flexibility in the financial markets, alternative investment funds may decide not to clearly

define their strategies in their prospectuses. Checking the performance of the fund and the fund managers frequently and actively and by verifying the compliance with agreements, enables a pension fund to intervene at an early stage, if necessary. Timely intervention can prevent serious losses. The monitoring process covers not only investment aspects but also operational matters. When a pension fund participates in a fund of funds, the monitoring process is partly outsourced. In that case, the pension fund's focus shifts from the underlying funds to the fund of funds.

3.8 Due diligence also applies when pension funds give mandates to external managers to invest the assets of the pension fund in alternative investments. Over and above the due diligence checks highlighted above, the contracts awarded to external managers need to be carefully checked. The specifications of adequate contract terms for external managers handling alternative investments depend on the characteristics of the pension fund and the investment under consideration. Broadly speaking, these terms will spell out an unambiguous limitation of risks in order to limit potential financial losses, the measures to be taken in case thresholds are crossed, adequate disclosure, a clear description of lock-up periods, and explicit cancellation and termination conditions and fees in general. The terms of any contract signed between a pension fund and an alternative investment provider will enable the pension fund to conduct adequate risk management. It is important to verify that the pension fund has come to a collection of agreements, which leaves the pension fund as a whole 'in control'. A prudent investment policy needs to be defined, in line with the interests of the stakeholders and to obtain an income appropriate to the incurred risk and liabilities covered. In order to prevent losses due to third-party liability, the pension fund may use a limited liability structure.

3.9 Having regular interaction with their alternative investment managers, especially where a material proportion of investments are with a particular manager, may strongly facilitate a pension fund's monitoring process. This could include regular questionnaires or on-site visits and may also include the engagement of specialist consultants to aid with the monitoring process.

4. Communication

GP 4a: Pension funds need to be transparent in their communication with stakeholders about their policies regarding the use of alternative investments and derivatives and the objectives which they seek to achieve in this respect.

GP 4b: Pension funds would be expected to at least annually report to members their exposure to derivative positions and the actual and potential profits or losses related to these.

GP 4c: Pension funds would be expected to disclose to members the fees and charges paid in relation to their alternative investments, how these are being managed (whether internally or externally), and the actual and potential profits and losses related to these.

Annotations

4.1 Given the potential level of misunderstanding and debate surrounding alternative investments, pension funds need to communicate their investment policy and risk management practices clearly and adequately to stakeholders. Such communications form the basis for proper disclosure of key information on operational management and financial soundness. It may help manage the pension fund's own reputation risk – hence, though most relevant to defined contribution funds (particularly those where members have choices and can switch funds), such disclosure is also relevant for defined benefit funds as well.

4.2 Pension funds may wish to report at least annually to members the total risk arising from their derivative positions and the actual profit or loss realised. The total risk assessment would include the

potential for future losses as well as possible losses stemming from counterparty risk, financial fraud, loss of liquidity and possible failure of collateral arrangements, among other risk factors. Any conflicts of interest relating to alternative investments would also be disclosed.

4.3 Pension funds would be expected to disclose to members fees and charges paid by the pension fund in relation to their alternative investments, where possible including the cost of the internal monitoring of those investments. Investment returns from these investments need to be reported net of fees and charges.

4.4 It should, however, be noted that such disclosure needs to be at a level which is understandable to members and does not overwhelm them with too much detail which could be counter-productive to their understanding of their fund and its strategy.

Part II Regulation and Supervision of Alternative Investments and Derivatives

5. Regulation of Pension Funds' Alternative Investments and Use of Derivatives

GP5a: The legal provisions may include maximum levels of investment in alternative investments – either internally or externally managed - to the extent that they are consistent with and promote the prudential principles of security, profitability, and liquidity pursuant to which assets should be invested.

GP5b: The use of derivatives that involve the possibility of unlimited commitments and, more generally, the use of derivatives for speculative purposes should be prohibited.

GP5c: The legal provisions may include maximum potential loss limits or other risk limits on derivative activities and on the global position (underlying assets plus derivatives).

GP5d: The legal provisions may limit pension funds' exposure to counterparty risk through appropriate measures.

GP5e: The legal provisions may require the use of an external, independent verification of valuation for non-listed, illiquid investments.

Annotations

5.1 In addition to prudent investment rules and risk management requirements, quantitative restrictions on investment in alternative investments may be imposed, especially on instruments where the regulator or supervisor considers that the market has insufficient transparency and pricing could be manipulated. Restrictions may also be imposed to limit exposure to illiquid assets, especially in a defined contribution context where members exercise investment choice and in circumstances where the portability of pension rights is important and likely.

5.2 Where quantitative restrictions are imposed, the regulator should ensure that they are appropriately designed so as to be consistent with a risk-based approach to supervision, and that pension funds are not disadvantaged against other market players because of these rules.

5.3 If quantitative limits on alternative investments and derivatives are imposed, these could be altered depending on the supervisor's assessment of the risk-management capabilities of the fund in relation to these instruments (i.e. if satisfactory a higher level of exposure would be allowed, with restrictive quantitative limits applied to those with limited capacity)

5.4 Derivatives serve mainly risk control and investment purposes, in the latter case substituting for the cash market instrument. In order to discourage speculative activities and leveraging, pension funds may be prohibited from running net short positions[12] (including uncovered exposure to credit protection instruments) and leverage could be limited or altogether prohibited.

5.5 Risk limits serve as a means to control exposures to the various risks associated with derivative activities. As such, regulatory authorities could consider imposing maximum potential loss limits or other similar risk limits on such activities.

5.6 Regulatory and supervisory authorities may impose counterparty requirements (such as minimum credit ratings or only trading via a Clearing House).

[12] Conditions in which a pension fund has more short positions than long positions in a given asset.

5.7 Given it may be difficult to determine the current market value of some unlisted, rarely traded alternative investments (as discussed in 1.3) which may provoke distortions of the price of these investments, an external, independent verification of valuations may be required by legislation.

6. Supervision of Pension Funds Alternative Investments and Derivatives

GP 6a: The relevant authorities should collect specific data on pension funds' use of alternative investments and derivatives

GP 6b: Pension supervisory authorities should provide guidance to pension funds on how they expect the risks relating to alternative investments and derivatives to be managed and the uses to which derivatives can be put

GP 6c: Supervisory oversight of pension funds' use of alternative investments and derivatives should be risk-based.

GP 6d: Pension regulatory and supervisory authorities should ensure that they maintain a good understanding of alternative investments and derivatives

Annotations

6.1 In order to monitor systemic risk across the pension industry, and indeed the financial system, pension regulatory and supervisory authorities should endeavour to collect disaggregated data on pension funds' investment in alternative investments and their use of derivatives. Where only a limited number of pension funds are supervised, this data can be collected as part of regular returns submitted to the pension supervisory authority. Where many hundreds or even thousands or funds are involved, this could be done by way of surveys.

6.2 Supervisory authorities should issue guidance to pension funds in their jurisdictions on how to oversee their investments in alternative products, clearly laying out what is expected of them. Guidance should also be provided on the use to which derivatives can be put and on the risk-management required to manage these positions. Supervisory authorities may also wish to require those investing in alternative instruments and using derivatives (or deciding to invest) to undertake training and/ or demonstrate minimum levels of knowledge.

6.3 In accordance with the IOPS core principle of risk-based supervision, the supervisory efforts with respect to the risk management for alternative investments should be concentrated in those areas where problems are most likely to occur and the impact of problems is most likely to be extensive. The pension fund supervisory authority seeks to ensure that the pension fund fiduciaries and/or investment managers properly identify and mitigate the risks associated with such investments. For supervisory authorities it is relevant to check whether pension funds ensure that their alternative investments comply with legislation, regulation or supervisory provisions and - if relevant - industry good practice (in terms of risk management, reporting and internal controls), including to what extent independent evaluation of the alternative investment provider's processes and systems takes place. In light of the IOPS core principle of proportionality, the response of supervisory authorities to the risks arising from alternative investments should take into account the specific situations of the pension fund it supervises and the nature of the risks arising from the alternative investments it holds. This does not mean that supervisory requirements for small, simple pension funds need to be lower, but it could mean that there will be differences in the way pension funds individually apply risk management techniques in practice, or in the approach that the supervisory authority takes in relation to the adequacy and appropriateness of the risk management applied by a pension fund to these investments.

6.4 Supervisory authorities may find it beneficial to adapt their off-site monitoring to provide information or analysis on the level of alternative investment and risk management procedures applied by pension funds. They may also wish to include detailed investigations to ensure that pension funds are performing due diligence in relation to these investments within their on-site inspections (either regular inspections or targeted investigations of pension funds where investment in alternative assets seems particularly high, unusual or inappropriate given risk management systems) or on ad hoc basis. Supervisors have to be satisfied that pension funds using alternative investments and derivatives have the ability to measure, analyse and manage the associated risks. This would include checking: the purpose alternative investments and derivatives are used for; the procedures for approving new types of investment: procedures for approving counterparties and brokers; procedures by which senior management exercises control over derivatives activities; quantitative limits to credit, market and other risks (and internal procedures for checking compliance with these) and procedures for monitoring liquidity; valuation procedures; the professional qualifications of those entrusted with derivatives activities.

6.5 Where a pension fund outsources its alternative investments, if it is not possible to determine whether the obligations for adequate risk management are fulfilled in respect to subcontracted activities, supervisory authorities may decide, where this is possible, to conduct further investigations into the parties to which tasks have been delegated. However, the governing board remains responsible for, and thus ensures, adequate risk management for alternative investments.

6.6 Given the complexity of these products and rapid financial development, regulatory and supervisory authorities should ensure that they maintain a good understanding of these products (through training or employing experts).