Good Practices in Relation to Investment Managers´ Due Diligence When Investing in Structured Finance Instruments

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Foreword

The purpose of this paper is to present the International Organization of Securities Commissions' (IOSCO) Good Practices in Relation to Investment Managers' Due Diligence When Investing in Structured Finance Instruments (IOSCO Good Practices). The paper provides background to the origin of and description of the scope of the IOSCO work. It also provides an overview of the regulatory requirements and industry practices relating to investment managers' due diligence across IOSCO member jurisdictions. These constitute the basis on which the IOSCO Good Practices have been developed.

The paper sets out five key messages which firms should keep in mind when assessing their due diligence policies and procedures. Furthermore, the paper sets out three key steps which should generally be included in a due diligence process along with some good practices to be considered at each step. Finally, it deals with questions relating to the use of third parties in the due diligence process, including credit rating agencies (CRAs).

I. Technical Committee Directive

1. In light of the subprime crisis, and the related instability in global credit markets, the IOSCO's Technical Committee agreed to establish a Chairmen's Task Force on the Subprime Crisis (Subprime Task Force) in November 2007. The purpose of the Task Force was:

   "to systematically study the subprime market turmoil and its effects on the public capital markets and make any necessary recommendations to better protect public markets from the spillover effects resulting from possible systemic problems caused by activity on private markets."

2. On 29 May 2008, the Subprime Task Force published a report[1] containing a set of recommendations. One of the recommendations requested that work be conducted through the IOSCO Technical Committee's Standing Committee on Investment Management (TCSC5), on investment managers' due diligence in the particular context of investments in structured finance products on behalf of collective investment schemes (CIS) offered to retail investors. The TCSC5 mandate focuses on due diligence when investing in structured finance products. It therefore does not deal with due diligence in connection with investment products other than structured finance ones. However, many of the principles and themes discussed in this paper apply regardless of the type of investment product.

3. More specifically, in the second section, *Issuer Transparency and Investor Due Diligence*, of its final report, the Subprime Task Force recommended that TCSC5 review:

   "the degree that investment managers who offer collective investment schemes to retail investors have invested in structured products, the type of due diligence typically conducted when making these investments, the degree to which these investment managers have been affected by the current market turmoil, and if and how investment managers may have shielded retail investors from the effects of their exposure to losses from structured finance products and any broader market implications such activity may have."[2]

4. In September 2008, in addition to the original recommendation on the part of the Subprime Task Force, the Technical Committee requested that TCSC5 conclude its review by developing good practices in relation to investment managers' due diligence.

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[1] *Report of the Task Force on the Subprime Crisis – Final Report, Report of the Technical Committee of IOSCO, May 2008*, available at http://www.iosco.org/library/pubdocs/pdf/IOSCOPD273.pdf.

[2] For the purpose of information, it is recalled that the IOSCO Task Force also recommended that the TCSC5, in coordination with the TCSC3:

- explore *"whether, as a matter of internal control, registered intermediaries and investment advisers avail themselves of practitioners who are skilled or trained enough to model fair valuation adequately in illiquid market conditions;"*
- undertake *"a study of the internal control systems of financial firms, including asset managers, in different IOSCO jurisdictions and develop principles to address any concerns identified."*

5. The purpose of this paper is to outline practices against which both the industry and regulators can assess the quality of due diligence processes. They are not intended to serve as comprehensive requirements as far as due diligence is concerned, or to impose any new obligations on any member of IOSCO. Industry and regulators may adopt, as appropriate, additional and/or complementary practices. Generally, these good practices reflect a level of common approach and a practical guide currently acknowledged by regulators and industry practitioners. While TCSC5 is not currently adopting principles with respect to due diligence in this paper, it may choose to undertake such a project in the future.

6. For the purpose of its work, IOSCO first consulted with market practitioners and TCSC5 regulators from July until September 2008 in order to identify respectively the industry's best practices, and the key regulatory aspects in relation to CIS investment managers' due diligence. More specifically, IOSCO consulted market practitioners in hearings which were held in June and November 2008, and in March 2009, and also by means of a questionnaire which was submitted to both international and leading national trade associations.[3] Likewise, IOSCO consulted TCSC5 regulators through an internal questionnaire for the purpose of having a general overview of the legal and regulatory frameworks currently governing investment managers' due diligence in the various TCSC5 jurisdictions.

7. IOSCO also set up a working group[4] composed of industry practitioners and TCSC5 members, whose main objective was to identify the issues in the field (notably in light of the responses received to the industry and regulators' consultations), and to consider if and how it would be appropriate to address the issues identified. The working group concluded its mission by establishing the IOSCO Good Practices for the purpose of providing the industry worldwide with relevant guidance in the field.

[3] It is noteworthy that the industry consultation was quite successful as consolidated responses were received from 7 industry associations (*i.e.*, the Swiss Funds Association, the Luxembourg ALFI, the UK Investment Management Association, the German BVI, the Spanish INVERCO, the Japanese JITA, and the European EFAMA).

[4] The members of the IOSCO working group are listed in Appendix 1.

II. Scope of the IOSCO work

8. It is emphasized that for the purpose of this paper:

   - the term *investment manager(s)* will be construed as referring to any person and/or entity entitled (whether by applicable law or regulation) to manage assets on behalf of clients and in particular, CIS portfolios. These terms will be considered as having the same meaning as the terms *asset manager(s)*, *investment adviser(s)*, and *asset management company(ies)*; and
   - all practices identified through the words *investment managers should…*, or a similar structure, are good practices.

9. Moreover, following the May 2008 report on the Subprime Crisis, IOSCO has determined the scope of its investment managers' due diligence work as relating to:

   (a) investments made on behalf of CIS offered to retail investors**.** The term *CIS* will be construed as referring to any portfolios composed of commingled assets which are collectively managed for the purpose of meeting a predetermined investment objective pursuant to a predetermined investment strategy. CIS will notably cover investment funds which are created in the form of mutual funds and investment companies, and which are offered to retail investors (as opposed to professional and/or institutional investors).

   (b) investments in structured finance instruments (SFIs) which have been determined for the purpose of this paper as referring to securitized and structured finance instruments,[5] that may basically be considered as complex (as opposed to more traditional or plain vanilla investment instruments) notably in consideration of their specific features in particular: where these instruments have a complex capital structure; are difficult to value (so that their valuations require specific skills and systems); and/or have a very limited or no secondary market (and are therefore potentially illiquid). Even though the IOSCO work is focused on fixed-income structured finance instruments given their pivotal role in the current crisis, it also applies to other types of structured finance instruments such as equity-linked instruments or instruments whose potential pay-off is linked to market parameters[6]. IOSCO's work also applies to financial derivative instruments[7] whose characteristics are close to that of SFIs. However, in such cases, the additional risks associated with the derivative feature of these instruments e.g. counterparty risk, will have to be considered specifically as such risks are not covered by this IOSCO work.

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[5] Such as collateralized debt obligations, residential mortgage-backed securities, and other types of asset backed securities.

[6] *E.g.,* notes issued by investment banks to investors which have a coupon or a final pay-off linked to market parameters such as interest rates, volatility or correlations.

[7] Such as credit default swaps.

III. General Overview of the Regulatory and Industry Practices

10. From a general perspective, due diligence is commonly required from[8] and performed by CIS investment managers in connection with any type of investment (irrespective of whether the investment is made in a structured finance product). It is neither a new nor a specific concept as far as CIS regulation is concerned. The fiduciary duty of investment managers towards their investors implies that they act at all times in a professional way. This implies that they perform adequate and efficient due diligence when investing in a financial product on behalf of a CIS, in order to be able to assess the pros and cons of such an investment. Given the specificities of SFIs, it is however necessary to define how the general requirements regarding such due diligence apply to the particular case of SFIs.

11. The degree to which CIS investment managers' due diligence is regulated may nonetheless be quite different from one jurisdiction to another as the performance of due diligence may either be required pursuant to general or specific legal or regulatory provisions, or simply result from common practice or general doctrine. However, in the majority of jurisdictions, CIS investment managers' due diligence will include the verification that the CIS is authorized to invest in the contemplated instrument, the review of the consistency of the contemplated investment with the CIS characteristics and valuation (notably CIS investment managers are usually required to be in a position to make their own fundamental analysis and to build their opinion on the valuation of an instrument before investing in it).

12. Moreover and in practice, the responses to the consultation indicate that the way CIS investment managers perform their due diligence is far from being consistent (notably as regards to how they amend their due diligence procedures to adapt them to unique financial products[9], timing[10], and the depth of the analysis conducted). This may be explained by the fact that in certain jurisdictions, the legal and regulatory due diligence requirements are usually provided in general terms, therefore allowing managers to develop their own interpretation of those requirements.

13. As a result of the differences between the legal and regulatory due diligence regimes throughout the various jurisdictions, and the range of due diligence approaches among CIS investment managers, CIS who have invested in SFIs have reported being affected by the market turmoil to various extents and in different ways (considering in particular the wide range of their exposures to SFI, and the various types of instruments invested in or exposed to). As a result, weaknesses have been revealed in the scope and comprehensiveness of some CIS investment managers' due diligence. In particular, some responses to the consultations showed that several areas had not been sufficiently covered by, or, as the case may be, had been excluded from CIS investment managers' due diligence requirements and/or practices. Such areas relate to :

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[8] It is noteworthy that in a very few jurisdictions, the performance by CIS investment managers of due diligence derives from common practice and largely relies on industry associations' codes of good conduct.

[9] For purpose of illustration, approximately only half of the responding CIS investment managers indicated adapting their due diligence to the specific features of a given financial instrument contemplated for investment.

[10] While most CIS investment managers appear to conduct their due diligence both prior to and during any investment, some managers nonetheless have reported focusing their due diligence either before or during the investment.

- the assessment of the investment's impact on the CIS (notably its global risk profile, valuation and liquidity);
- the assessment of the contemplated investment's legal characteristics;
- the management of any identified anomalies;
- the relevance of the CIS investment managers' resources and organization for the purpose of effecting and controlling due diligence;
- the effectiveness and responsiveness of the CIS investment managers' due diligence policies and procedures;
- the conditions under which the performance of due diligence may be delegated to a third party;
- the verification of the consistency of the contemplated investment with the CIS investment managers' own investment decision processes; and
- the establishment, maintaining and monitoring of documented risk management, compliance or internal control policies and procedures by CIS investment managers.

14. The market turmoil has, in many cases led CIS investment managers to reconsider their due diligence internal policies and procedures with a view to improving their efficiency and adequacy notably by strengthening their monitoring processes. For example, they are considering improvements in the following areas :

- credit risk, counterparty risk, liquidity management, valuation and stress tests;
- risk management and internal control policies and procedures;
- enhancing the information delivered to retail investors; and
- extending the reporting made to senior management.

A few jurisdictions have also decided to consider whether updates or amendments should be made to their existing legal or regulatory framework for it to be more effective.

IV. Key Messages

15. In reconsidering due diligence policies and procedures, the key messages below should be kept in mind.

- **Investing in a SFI is different from investing in a more traditional instrument often referred to as a *plain vanilla* instrument. The risks are different, and call for a tailored due diligence process.**

- **If you do not understand a SFI, do not buy it.**

- **Due diligence is and must remain a value-added process. It is not and must never become a plain box-ticking process.**

- **Due diligence is generally a three step, and iterative process, which is structured around the understanding of the underlying assets of the SFI, of its structure and of how it fits into the CIS's mandate.**

- **Due diligence is not a static process. It is an on-going process, which starts at the time the initial investment in the SFI is contemplated and ends when the SFI matures or is divested.**

V. Investment Managers' Good Practices when Investing in Structured Finance Instruments

A. Key Practices

- **When assessing a SFI, investment managers should assess the availability, reliability and relevance of information available both on the market and on the underlying assets.**

- **The unique properties of the specific pool of assets should not be assumed to be identical to the broader asset category. Investment managers should ensure that their analysis of the underlying assets is based on information that is relevant for that specific type of underlying assets.**

- **The analysis of the structure of the SFI should be conducted both in *normal* and in *stress* scenarios.**

- **The investment manager should also ensure that he has or has access to the right expertise to conduct an analysis of a particular SFI, including legal expertise.**

- **Whatever the structure of the SFI, the asset manager should understand how cash flows will be allocated to the different tranches of the SFI.**

- **The asset manager should use the practices laid out in this paper to build his own opinion on the SFI: is the price right for the risks taken on behalf of the investors?**

- **The investment manager should check that investing in the SFI on behalf of the CIS is consistent with the disclosures, mandate and internal operations of the CIS.**

- **The investment manager should understand the methodology, parameters and basis on which the opinion of a third party was produced. He should have adequate means and expertise to challenge the methodology and parameters.**

16. Generally, due diligence, at a minimum, should rely on the following three on-going steps aimed at understanding, assessing and monitoring:

- the underlying assets of the SFI, since they will drive the cash flows of the SFI;
- the structure of the SFI, including its cash flow structure, how risks are mitigated or increased, and what role third parties play in the structure; and
- the consistency of investing in the SFI with the mandate of the CIS and with the way it has been marketed to investors, and the ability of the asset manager to handle the investment in that SFI.

17. These three steps feed each other. They are not purely sequential steps, where due diligence starts with step 1 and ends with step 3, but rather iterative steps where issues identified at each step may lead to the contemplation of additional issues at another step.

18. When assessing the effectiveness of their due diligence processes, investment managers must be wary of two risks:

    - The risk of so-called *me too* behaviour, where pressure on short term performance pushes investment managers to invest in SFIs similar to those invested in by their peers without performing proper due diligence or whilst disregarding the conclusions of this due diligence; and
    - The risk that due diligence is not focused on the right issues. This may lead to the investment manager overlooking a specific risk of the SFI.

    Investment managers must also ensure that their due diligence processes are tailored to the nature of the SFI under analysis. Given the wide variety of SFIs' underlying assets and structures, complying with the key practices provided in this paper can turn out to be very simple for some types of SFIs while requiring significant upgrades and investments in human and technical resources for SFIs of the more complex type.

B. Step 1: Analysing the Underlying Assets of the SFI

19. The aim of step 1 is to understand the dynamics of the underlying assets of the SFI, since these will drive the cash flows paid by the SFI to the investor. This means understanding both the market these assets belong to, and how these assets behave compared to that market.

General expectations

> **When assessing a SFI, investment managers should assess the availability, reliability and relevance of information available both on the market and on the underlying assets.**

20. **Investment managers should assess the availability, reliability and relevance of information available both on the market and on the underlying assets.** should check that adequate information will be available on an on-going basis to conduct monitoring of the SFI. They should further check that reality remains in line with any model estimates used to analyse the SFI.

    For example on assessment of SFI information: certain collateralised debt obligations (CDOs) which presented issues in some jurisdictions, known as *blind CDOs* provided very little information on the characteristics of their underlying assets. Investors therefore based their investment decision on the information the arranger of the CDO was willing to disclose on the underlying assets, and on the ratings of the tranches, which were based on additional information disclosed by the arranger to the rating agencies. With hindsight, it appears that these CDOs did not provide sufficient information to enable investors to perform adequate due diligence.

21. Identifying flaws in the information available does not necessarily prevent investment in the SFI. It is up to the investment manager to assess and mitigate the corresponding risks, and decide whether the resulting level of return is adequate or not.

22. Information needed at this stage is not solely quantitative. In many cases, understanding market dynamics will require collecting qualitative information on the underlying market.

From market analysis to assets analysis

The unique properties of the specific pool of assets should not be assumed to be identical to the broader asset category. Investment managers should ensure that their analysis of the underlying assets is based on information that is relevant for that specific type of underlying assets.

23. **The unique properties of the specific pool of assets should not be assumed to be identical to the broader asset category. Investment managers should ensure that their analysis of the underlying assets is based on information that is relevant for that specific type of underlying assets.** They should also check that the granularity of the data is adequate.

    For example, the limits of the data used to analyse US subprime MBS issued in 2005-2006 were not properly taken into account. Over a short period of time the number of U.S. subprime and other low-documentation mortgage loans soared[11]. The rapid development of this market over the previous years along with features such as the diversity in the types of loans as well as the important link between house prices and the risk of default[12], dramatically impacted the nature and the level of risk of that market and therefore the securitized offerings. Disregarding, or inappropriately evaluating, these facts resulted in erroneous assessments of the risk profile of these MBS.

    As a further example, features that lead to a concentration of risks, such as a concentration of mortgages in a pool that originate from the same geographical area, present different risks as late payments/defaults will jump in this group if economical events uniquely (or particularly) affect this geographical area. Such a risk would not be factored in correlation data available for seemingly similar pools of mortgages, if the data on those households is based on various geographical areas.

    The availability of different tranches also impacts due diligence. If the highest tranche of a MBS is meant to be structured to withstand everything but exceptional events, aggregate data on the average risk profile of the pool of mortgages may not be

[11] In 2005, these mortgages represented 30% of the total dollar amount of mortgage lending, up from only 10% in 2003. See Chris Mayer, Karen Pence and Shane Sherlund, *The Rise in Mortgage Defaults*, Finance and Economics Discussion Series, Federal Reserve Board (November 2008).

[12] The subprime mortgages had a wide range of loan and default characteristics such as loans with options to defer and loans that converted from fixed to flexible interest rates. Although not all the loans were low-quality, there were borrowers who were relying on rising house prices to allow them to refinance to ensure that they could continue to make their payments. As housing prices began a downturn in 2005, borrowers seeking to refinance to avoid higher rates were unable to do so, leading to defaults and foreclosures. See Paul Mizen, *The Credit Crunch of 2007-2008: A Discussion of the Background, Market Reactions, and Policy Responses,* Federal Reserve Bank of St. Louis Review (September/October 2008).

sufficient to assess the risk profile of that tranche, since it will not adequately reflect the risk of exceptional events. In some cases, a loan-level analysis might be necessary to correctly assess a risk profile.

C. Step 2: Analysing the Structure of the SFI

24. The aim of step 2 is, through the understanding of the structure of the SFI, to build an opinion on that SFI: is its price right for the risks it gives exposure to?

25. When conducting that analysis, the investment manager should ensure that all relevant risks are identified and assessed: though the focus will tend to be on market risk (including risks linked to market parameters such as interest rates, volatility or correlations), other types of risks must not be disregarded. In particular, recent market events have shown that SFIs often embedded a liquidity risk and that counterparty or issuer risk should be carefully assessed.

    For example on liquidity: the rationale behind Structured Investment Vehicles (SIVs) was to fund highly-rated long term assets through a combination of short-term commercial paper, medium-term notes and long-term capital notes. The objective was to maximise the difference between the interest on the assets and the cost of funding, with much of the difference based on the maturity mismatch of the SIV's assets and liabilities. However, this arbitrage was not without risk. When funding dried up for the short-term commercial paper issued by SIVs, the liquidity risk embedded in these structures was revealed: these structures relied on a continuous access to liquid market since their back-up liquidity lines only covered a small portion of their assets.

    With respect to issuers or counterparties, the failure of Lehman Brothers revealed a risk that had in some cases been disregarded by investors, namely the issuer risk. In some jurisdictions, some investors seeking to limit the market risk linked to the direct investment in plain vanilla assets such as equities or CIS, had bought capital-guaranteed bonds issued by Lehman Brothers whose pay-off was directly linked to the performance of these risky assets (e.g., 60% of the final performance of a given CIS). When Lehman Brothers failed, they lost both the benefit of the partial indexation to the performance of the risky assets and the capital guarantee, and became simple creditors of Lehman Brothers.

The analysis of the structure of the SFI should be conducted both in *normal* and in *stress* scenarios.

26. **The analysis of the structure of the SFI should be conducted both in *normal* and in *stress* scenarios.** Stress testing should include the testing of outliers.

27. When conducting that analysis, the investment manager should first assess the reliability and relevance of the information used. The analysis should not be based solely on marketing documents. It should be based on legally binding documents or on draft versions of these documents (e.g., prospectus and/or term sheet). Draft documents should be carefully and cautiously used and the impact of any discrepancies with the final, legally binding version should be checked.

The investment manager should also ensure that he has, or has access, to the right expertise to conduct an analysis of a particular SFI, including legal expertise.

28. **The investment manager should also ensure that he has, or has access[13] to, the right expertise to conduct that analysis, including legal expertise.**

Analysing the structure of the SFI in normal scenarios

29. Most SFIs are built around the allocation of cash flows to the different tranches of the SFIs. In the simplest cases, these cash flows are produced by assets held by a special purpose vehicle (SPV), and this SPV issues the different tranches of the SFI. In more complex cases, assets may be held by an entity which is different from the issuer of the SFI and cash flows from these assets are transferred to the issuer through financial derivative instruments. In yet other cases, it is up to the issuer of the SFI to hedge the risk taken through the SFI by entering into financial derivative contracts with market counterparties.

Whatever the structure of the SFI, the asset manager should understand how cash flows will be allocated to the different tranches of the SFI.

30. **Whatever the structure of the SFI, the asset manager should understand how cash flows will be allocated to the different tranches of the SFI.** He should check that the legal documentation of the SFI describes the allocation of cash flows in a comprehensive and unambiguous way.

    For example: In some RMBS (Residential Mortgage Backed Securities), payments on principal for the different tranches was made on a pro-rata basis rather than a sequential basis. This meant that payments on principal were made simultaneously for all tranches, and that cash-flows were diverted to the senior tranches if there were certain losses. If default rates in the underlying loans experienced a sudden increase, it could turn out that the diversion of cash flows to the senior tranches came at too late a stage to prevent those tranches from suffering losses. In other words, there was a risk that senior tranches could experience a loss even though more junior tranches had not been wiped out. Accordingly, appreciating how cash flows would be allocated to the different tranches of the SFI under different scenarios was important to evaluating the SFI.

31. The asset manager should also understand the roles of the parties involved in the SFI. A SFI often involves a number of parties: typically, an originator transfers cash-flow producing assets to an SPV. This SPV issues securities with different degrees of subordination (the tranches). The deal is structured with the help of a bank, known as the arranger. A servicer is in charge of collecting payments from the assets (i.e., monthly payments for loans). An asset manager may be in charge of actively managing the assets. Yet other entities may provide credit enhancement or liquidity lines. Lawyers are often involved in the structuring of the deal and issue legal opinions on its robustness. Often rating agencies are also involved.

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[13] Issues regarding investment managers' human resources are considered in paragraphs 46 to 48. Where the investment manager does not have direct access to the right expertise to conduct that analysis and therefore has to use a third party for this purpose, paragraphs 49 and the following apply.

32. Because of the number of parties involved, identifying the different parties, their role and responsibility may not be straightforward. The information may be split in a number of different documents, which may not be legally binding, or may even be unavailable. Yet understanding *who does what*, *who is responsible for what*, *where are the conflicts of interest and how are they dealt with?* is key to a proper due diligence. The fact that a deal is marketed or arranged by a well-known financial institution is no substitute for such an analysis.

    For example: Conflicts of interest, in a variety of forms, were part of the recent financial turmoil. For example, in some countries, mortgage intermediaries were remunerated on the quantity of loans rather than on their quality. The use of off-balance sheet vehicles and SPVs also created incentives. Ratings also had a role as ratings often were part of a manager's mandate, creating a demand for rated products. Credit rating agencies' conflicts of interest have also been well described. In the case of CDOs, investors had a strong interest in CDOs whose underlying assets were debts from LBOs (Leverage Buy-Out) and enabled banks to off-load 100% of their exposure to such deals through the CDOs. The situation was similar to the subprime market: the remuneration of the bank depended on the number of deals arranged, but not on the adequate pricing of the risk linked to the debt, since that risk was transferred to the CDOs. Recognising the conflicts of interest and their implication, especially as far as underwriting standards were concerned, was important to investor's assessment of, and due diligence on, such CDOs.

    Monoline insurers were also important in the SFI world. SFIs paid an insurance premium to these guarantors in exchange for a pledge to make up any shortfall in interest or principal in the more senior tranches of the SFIs. The financial crisis revealed that these insurers too had underappreciated or disregarded the correlation risk of this type of activity (i.e., that underlying assets of many SFIs all went wrong at the same time) and had insufficient financial means to meet their liabilities. Identifying that the risk profile of the more senior tranches of these SFIs depended on the ability of these monoline insurers to meet their liabilities was an important element of the due diligence regarding investments in such SFIs.

Analysing the structure of the SFI in stress scenarios

33. Analysing how the SFI behaves in stress scenarios is all the more important since, contrary to issuers of bonds or shares, SFIs are often structured once and for all and therefore have a very limited ability to adapt to unforeseen situations.

    For example: Whereas a company issuing corporate debt may change its business model if unforeseen changes affect its business environment, SFIs have little or no ability to change their structure.

34. The first step towards that analysis is to identify the stress scenarios and how they will impact the SFI: what can go wrong and what happens if that goes wrong? This analysis should not be restricted to the structure of the SFI itself but should be extended to other characteristics of the SFI, including underlying assets (i.e., loans), mechanisms that direct the cash flows from these underlying assets to the SPV that issues the SFI, ability of the manager of the SFI to rebalance the portfolio of underlying assets whenever necessary, etc.

For example:, a capital-guaranteed bond where the capital-guarantee is achieved through CPPI (constant proportion portfolio insurance) techniques and where the risky assets are invested in SFIs, implicitly requiring that these SFIs remain sufficiently liquid to enable the manager of this pool of SFIs to sell them if need be (i.e., to prevent the value of the underlying assets to fall below the bond floor).

35. The investment manager should check how stress scenarios are reflected in the way the SFI is structured, and if provisions designed to deal with these stress scenarios are easily and quickly enforceable. This analysis should not be restricted to the legal structure and documentation of the SFI itself. It should be extended to other characteristics of the SFI. It should also take into account the practical feasibility of these provisions, especially when they rely on the availability of third parties with a specific expertise.

    For example: Most residential mortgages in the US are non-recourse loans: should the debtor default, foreclosure is the only option for the lender to recover all or part of the loan. No recourse is possible on the income or the other assets of the debtor. This particular feature of the US market should be taken into account when elaborating stress scenarios in relation to MBS involving US mortgages.

    Servicers have an important role in SFIs. For example, servicers and the use of loan recovery specialists when dealing with late payments or foreclosures in residential mortgages is an example of the necessity to take into account the operation and practical feasibility of the provisions designed to deal with stress scenarios relating to the SFI's underlying assets. Given the possibility of high defaults in certain residential mortgages, there is a risk that provisions heavily relying on the actions of these servicers may be less effective than expected. This should be taken into account when assessing the SFI and the impacts of problems in its underlying loan portfolio.

36. The investment manager should analyse how the cash flow structure of the SFI changes in stress scenarios (i.e., impact of triggers/breaches of covenant) and to which tranches this is detrimental/beneficial.

    For example: Some SFIs had market value triggers aimed at protecting the most senior tranches. These ensured that cash flows would be diverted to the most senior tranches or even that early liquidation would occur if the market value of the assets held by the SFIs fell below a given level. These triggers clearly protected senior tranches to the detriment of more junior tranches. In the case of early liquidation, this could mean that junior tranches would be forced to recognize losses because of the fire sale, in a distressed market, of the assets of the SFI and despite the fact that these losses would have been more limited, or even nonexistent, had the SFI kept those assets until the maturity of the structure. Analysing such a risk should be part of the due diligence process.

Building an opinion on the SFI

The asset manager should use the practices laid out in this paper to build his own opinion on the SFI: is the price right for the risks taken on behalf of the investors?

37. **These different steps should enable the asset manager to build his own opinion on the SFI: is the price right for the risks I am taking on behalf of the investors?**

38. Building an opinion on the price of the SFI implies that the asset manager understands what the drivers of that valuation are, and how sensitive the price is to market parameters. This requires that both quantitative and qualitative analysis be conducted. Given the often complex structure of SFIs, the quantitative analysis of the SFI will form an important part of its valuation assessment[14]. It is however essential that this assessment be complemented by a qualitative analysis, which should enable asset managers to identify any limitations to that quantitative analysis. This qualitative analysis also should enable asset managers to stress test the parameters used in the quantitative analysis (i.e., correlations, default rates).

39. Building an opinion on the price of the SFI implies that the investment manager should in all cases be able to explain why he thinks the price he is paying is correct for the risks he is taking on behalf of the CIS. For this purpose, it needs in particular to conduct a robust analysis so as to be able to justify its investment decision. In other words, a SFI with seemingly higher returns than what the market usually offers should raise alarm bells rather than lead to a quick investment decision.

D. Step 3: How Does the SFI Fit into the CIS Mandate?

The investment manager should check that investing in the SFI on behalf of the CIS is consistent with the disclosures, mandate and internal operations of the CIS.

40. **The aim of step 3 is to check the consistency of investing in the SFI with the CIS's mandate and the way it has been marketed to investors, and the ability of the asset manager, including its control, compliance and risk management systems, to handle the investment in that SFI.**

41. As mentioned above, investing in a SFI is different from investing in a plain vanilla instrument. SFIs can give exposure to a broader array of risks, including leverage, counterparty and liquidity risks. Moreover, their own liquidity can change quickly and dramatically, their ability to adjust to a changing environment is limited, and handling the investment/divestment in a SFI from an operational point of view can be tricky. This means that, once steps 1 and 2 of the due diligence process have enabled the asset manager to build his opinion on the SFI, the final investment decision should not be taken for granted and should on the contrary require and rely on additional due diligence.

Compatibility with CIS disclosures

42. The investment manager should check that investing in the SFI on behalf of the CIS is consistent with disclosures made, whether in legal or marketing documents, to investors regarding the CIS investment objectives, strategy and its risk profile[15].

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[14] This quantitative analysis should be based on parameters tailored to the pool of underlying assets and not on generic assumptions regarding this type of assets, as already mentioned in paragraph 23

[15] IOSCO principle 19 regarding CIS states that "Regulation should require disclosure, as set forth under the principles for issuers, which is necessary to evaluate the suitability of a collective investment scheme for a particular investor and the value of the investor's interest in the scheme".

The investment manager should be all the more cautious if the CIS documentation does not explicitly mention the possibility of investing in SFIs. Though this does not necessarily mean that such an investment is not possible, it does mean that a precise analysis of the CIS documentation (notably as regards the description of the CIS investment objective, strategy, and risk profile) should be made to check that such an investment is consistent with the overall disclosures made.

Compatibility with CIS Mandate

43. The investment manager should check that the SFI correctly fits into the CIS Mandate. Specific attention should be paid to valuation and liquidity issues, as well as to the way the SFI interacts with the other assets held by the CIS and affects the overall characteristics and structure of the CIS portfolio.

43. The investment manager should check that the information available on the SFI valuation is compatible with the valuation requirements of the CIS. CIS usually provide for daily or weekly redemptions. This implies that the asset manager be able to provide an accurate valuation of the SFI on a daily or weekly basis. If the valuation relies on quotes provided by market makers, many questions have to be considered:

- how relevant are these quotes?;
- have the market makers pledged to trade significant amounts based on these quotes?;
- have they pledged to continue providing these quotes over the lifetime of the SFI?;
- should these market makers stop providing those quotes, are there alternative valuation sources?;
- is the asset manager able to independently value the SFI if need be?

45. The investment manager should check that the liquidity of the SFI is compatible with the redemption frequency of the CIS and with the necessity to maintain the portfolio structure of the CIS over time. Liquidity of the SFI includes the liquidity embedded in the structure of the SFI, as referenced in paragraph 25, as well as in the market. For example, how is the secondary market of the SFI structured, including the role of market makers? Should the CIS have to meet significant redemptions (i.e., in terms of number or amounts of the redemption requests), is it possible to maintain the portfolio structure of the CIS or is there a risk that redemptions will be met with the most liquid assets, leaving the remaining investors with exposure to a growing portion of illiquid assets?

For example: a CIS experiencing significant outflows over a given period (i.e., a couple of months) may need to sell both liquid and less liquid assets in order to meet redemptions without distorting its portfolio structure. If redemptions were met solely through the sale of liquid assets, without subsequent sales of less liquid assets to maintain the portfolio structure, the proportion of less liquid assets would increase to unmanageable levels, to the detriment of the remaining investors.

Compatibility with asset manager organisation, means and internal controls

46. An asset manager which invests in plain vanilla financial instruments will need to adapt its organisation, resources (both human and technical) and internal controls to invest in

SFIs. In such a case, significant modifications may be needed in the organisation, the human and technical resources and the internal controls of the asset manager.

There is a tremendous variety of SFIs' underlying assets and structures, and levels of risk. Expertise and experience in SFI risk analysis is not as widespread as for equity and credit research. These circumstances call for asset managers to pay specific attention to the adequacy of their organisation, resources and internal controls with the types of SFIs being considered for investment. They should ensure that the role and responsibilities of the different departments are clearly defined and adequately documented. They should check that these departments have the right expertise to perform the expected tasks.

47. Difficulties may come from all departments of the company as some departments may lack the relevant expertise to perform their part of the due diligence process or of the operational work on the CIS, and the different IT systems may not be able to enter and keep track of all the relevant characteristics of the SFI (parties to the deal, expected cash flows, legal versus expected maturity, etc.). This may lead to inadequate presentations of the CIS portfolio at the front, middle and back office levels, to inaccurate calculation of legally binding ratios (e.g., diversification, counterparty risk) or of risk monitoring data (can all risks linked to the investment in the SFI be monitored through the current systems and procedures?), or to some situations where important reporting coming from the issuer of the SFI may be disregarded because the middle office was not aware of its significance, etc.

48. Before investing in a new type of SFI, the asset management company should assess what upgrades of its organisation, resources and internal controls are needed and make sure they are achieved in due time, and in any event, before the investment. This assessment should rely on a formal process[16] which is often referred to as a *new product approval* process[17].

    This process should enable the asset management company to check that all parties to the due diligence are aware of what is expected of them and have the appropriate expertise to do so. This means including not only the front and middle offices, but also the back office, internal control, compliance and risk management departments, marketing department, department in charge of producing the CIS reporting, legal department, etc. It might be necessary to involve third parties too (i.e., depositary/custodian). It also means that it may be appropriate to evaluate and modify the policies and procedures, including internal, compliance and risk controls, of the asset manager as well as the technical means (or IT systems) for new SFIs.

    The following examples illustrate the types of situations that the above mentioned approach should help the asset management company avoid:

    - The front office takes the lead over the other departments in the *new product approval process*, concerns raised by other departments during the process are disregarded, or the process itself is disregarded, in order to enable the front office to

[16] In Europe, this requirement is often referred to as the necessity to have a "documented and traceable" process.

[17] The Money Market Working Group of the Investment Company Institute made a similar recommendation in its March 2009 report.

grasp what it considers to be unique investment opportunities (i.e., SFIs with a very attractive return);

- The internal control or risk control departments lack the appropriate resources or expertise to assess the risk profile of the new type of SFI. The input or approval given by these departments should not be purely formal and should add value to the process;
- The accounting system is not able to properly book a new type of SFI. Since the front office has already bought the instrument, the back office finds a way around the problem by making a booking which it knows is not appropriate. This results in improper reporting, since the SFI is booked under another type of instrument, and also means that essential information regarding the SFI is left out; and
- The front office buys a new type of SFI exposed to variance risk. The risk monitoring system is not able to handle this type of risk as there are no risk limits regarding the exposure to this type of risk, and aggregate risk indicators (i.e., VaR, stress tests) do not take into account that risk. This results in the risk profile of the CIS portfolio being grossly underestimated.

E. Use of Third Parties in the Due Diligence Process

49. The due diligence process often relies on information or opinions provided by third parties. The rationale for the investment management companies is either to gain access to expertise that is not available to them, or to benefit from economies of scale on relatively simple repetitive tasks.

50. In all cases, the use by an investment manager of a third party in the course of its due diligence process does not alter or diminish the investment manager's responsibility.

51. The case where the investment manager outsources a relatively simple, clearly defined and limited part of its due diligence process does not call for specific requirements other than checking that the asset manager is able to control the performance of the outsourced tasks. This implies that the investment manager has and maintains the relevant expertise and organisation (e.g., human and IT resources) to appropriately control on an on-going basis that the tasks outsourced are being adequately performed by the third party.

52. Where the asset manager seeks to gain access to expertise he does not have, he must be very cautious on how he handles the information he gets. Opinions of third parties can contribute to a due diligence process but should never replace the asset manager's own opinion, nor relieve him from his duty to perform adequate due diligence. Decision-making cannot be outsourced.

53. Where the opinion is issued by a party to the SFI (i.e., the structurer or the originator) it should be treated with caution and never as a *third party opinion*.

54. Where the opinion is issued by a credit rating agency, the asset manager should acknowledge that, contrary to ratings of plain vanilla bonds or shares, the rating generally relies more heavily on quantitative modelling (e.g., cash flow modelling) and is therefore very sensitive to the underlying hypothesis of this modelling.

The investment manager should understand the methodology, parameters and basis on which the opinion of a third party was produced. He should have adequate means and expertise to challenge the methodology and parameters.

55. **A good practice is for the investment manager to understand the methodology, parameters and the basis on which the opinion of the third party (e.g., the credit rating agency) was produced, and to have the adequate means and expertise to challenge that methodology and the parameters (notably, to identify their limits).**

In this regard, reference should be made to the IOSCO work on CRAs notably the IOSCO Code of Conduct Fundamentals for Credit Rating Agencies as first published in December 2004 and updated in May 2008[18] for the purpose of addressing the issues identified in relation to credit ratings for SFIs in the context of the credit crisis. For the purpose of this paper, regard should in particular be given to the recommendations of the IOSCO Code of Conduct regarding the CRAs' responsibilities to the investing public and issuers, which state that, among other things, a credit rating agency should:

- provide investors and/or subscribers with sufficient information about its loss and cash-flow analysis of SFIs so that an investor allowed to invest in the SFI can understand the basis for the agency's rating;
- disclose the degree to which it analyzes how sensitive a rating of a SFI is to changes in the agency's underlying rating assumptions; and
- disclose the principal methodology or methodology version in use in determining a rating.

Reference should also be made to IOSCO's permanent oversight of CRAs (and in particular of the latter's implementation of the aforementioned IOSCO Code of Conduct as updated) through the newly created Technical Committee Standing Committee on Credit Rating Agencies. The purpose of that IOSCO standing committee will be two-fold:

(a) to regularly discuss, evaluate, and consider regulatory and policy initiatives on credit rating agencies; and
(b) to facilitate regular dialogue between securities regulators and the credit rating agencies' industry.

57. In all cases, a credit rating is no substitute for due diligence. The asset manager should understand how the opinion of the credit rating agency was formed and shouldn't rely excessively or solely on it to form his own opinion of the SFI. He should be all the more cautious when he is either unable or unwilling to go into the details mentioned in the previous paragraph. He should treat credit ratings as the beginning of due diligence, and never as the end.

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[18] The revised *IOSCO Code of Conduct Fundamentals for Credit Rating Agencies* is available at: http://www.iosco.org/library/pubdocs/pdf/IOSCOPD271.pdf

Appendix 1:

Members of the IOSCO Working Group on Investment Managers' Due Diligence

The IOSCO working group is chaired by Pauline Leclerc-Glorieux, Head of the Investment Services Providers and Products Department at the French *Autorité des marchés financiers*.

Its members are as follows:

a) Industry practitioners:

- Mr. John Hollyer, Head of Vanguard's risk management team, Vanguard (US);
- Mr. Pierre-Emmanuel Julliard, Head of Structured Finance Division, AXA Investment Managers (France);
- Mr. Robert Marshall, Director of ABS Credit Research Fixed Income, M&G Investments (UK);
- Ms. Susan Olson, Senior Counsel, International Affairs, ICI (US);
- Dr. Wolfram Peters, Head of Risk Controlling, Chief Risk Officer, Allianz Global Investors Deutschland GmbH (Germany).

b) Technical Committee Standing Committee on Investment Management Members:

- *Autorité des marchés financiers*, France (Pauline Leclerc-Glorieux, Diane Hamilton);
- BaFIN, Germany (Johannes Blankenheim, Stephanie Kremer);
- CONSOB, Italy (Francesco de Maria Di Rossi);
- Financial Services Authority, UK (Brandon Horwitz);
- Securities and Exchange Commission, US (David Grim, Sara Crovitz).

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