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Dear Roger,

As discussed, this letter is a supplement to Citi's response to the NPR[1] concerning the regulatory capital treatment of investments in hedge funds and similar leveraged funds. The primary focus of this letter is to differentiate securitization structures from leveraged funds. Secondarily, we recommend that investments in hedge funds, and similar leveraged funds, should be treated like other private equity investments. We believe other banks support our views.

Summary

We recommend that the Risk Weighted Assets (RWA) of investments in hedge funds, and similar leveraged investment funds that do not have tranched liabilities, should not be calculated by means of the Basel II securitization rules, but should instead be calculated under the rules for other investments in private equity.

Our proposal is similar to how investments in hedge funds are treated in the CRD. We think this is another example of where the implementation of Basel II in the US should be consistent with its implementation in other countries.

An analysis of their essential characteristics shows that hedge funds, and similar leveraged investment funds, are very different from securitization structures.

The essential characteristics of securitization[2] include a) the pooling of assets in an SPV, b) the issuance of a tranched set of liabilities to fund the purchase of those assets, and c) the separation of the credit risk of the underlying pool of assets from the credit risk of the originators of those assets.

An essential characteristic of tranching is the creation of a hierarchy of securities such that the most junior tranches will be the first to absorb losses on the underlying assets of the securitization without interrupting the contractual payments to the more senior tranches. This structure sharply contrasts with a non-securitization structure, in which a default by an obligor on any of its material liabilities is a default on all of its liabilities.

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[1] This memo concerns investments in hedge funds and other leveraged funds in the banking book. With regard to potential hedge funds positions in the trading book, we reiterate our opposition to the proposal to bifurcate the actual trading book into "covered" and "non-covered" positions, as articulated in our own response to the NPR for Market Risk and the response of the joint industry associations (ISDA/IIF/LIBA).

[2] More broadly, the SPV could fund the purchase of its assets either through the issuance of pass-through securities or through the issuance of tranched liabilities. Thus, to be precise, the latter should be referred to as "structured" or "tranched" securitization, However, to be consistent with its usage in Basel II, we will use the term "securitization" in this comment letter to only mean "tranched" securitization.

The essential characteristic of a hedge fund is that it is an investment fund that charges a performance fee and is open to a limited number of investors. The particular assets and investment strategy of the fund are only limited by the contracts governing the fund. The investors pay the managers of the fund a performance fee as compensation for the managers' skill at actively managing the underlying assets of the hedge fund to earn a high rate of return to investors relative to the risks taken.

Banks invest in hedge funds as general or limited partners. Hedge funds, and other similar leveraged investment funds, do not issue tranched liabilities.

In contrast, investments in SIVs (Structured Investment Vehicles) or other investment funds that have the characteristics of securitization could properly be treated under the securitization rules.

A) Definition of Securitization and Tranching of Liabilities

Cash Securitization is the process by which a pool of underlying assets are sold by their originator(s) directly, or indirectly (through the market), to an independent SPV, which funds the purchase of those assets by issuing a set of tranched debt securities. Synthetic Securitization is a similar process except that the assets stay with the originator(s) while the credit risk of those assets is transferred to the SPV in the form of credit default swaps or guarantees.

As stated by The Committee on the Global Financial System (2005)[3], the characteristic features of structured finance instruments are (underline added):

1) "Pooling of assets (either cash-based or synthetically created);
2) "Tranching of liabilities that are backed by the asset pool (this property differentiates structured finance from traditional "pass-through" securitisations);
3) "De-linking of the credit risk of the collateral asset pool from the credit risk of the originator, usually through use of a finite-lived, standalone special purpose vehicle (SPV)."

Complementing this definition, the Final Framework of Basel II (2006) states in paragraph in paragraph 539, that

> *"A traditional securitisation is a structure where the cash flow from an underlying pool of exposures is used to service at least two different stratified risk positions or tranches reflecting different degrees of credit risk. Payments to the investors depend upon the performance of the specified underlying exposures, as opposed to being derived from an obligation of the entity originating those exposures. The stratified/tranched structures that characterise securitisations differ from ordinary senior/subordinated debt instruments in that junior securitisation tranches can absorb losses without interrupting contractual payments to more senior tranches, whereas subordination in a senior/subordinated* debt *structure is a matter of priority of rights to the proceeds of liquidation."*

The "equity-tranche" of a securitization is simply one of the liabilities of the SPV. By the nature of the tranching of the cash flows, it is the lowest-rated security and the one that absorbs the initial losses.

[3] "The role of ratings in structured finance: issues and implications", Committee on the Global Financial System, 2005. Page 1, http://www.bis.org/publ/cgfs23.pdf

As explained by the just quoted paragraph 539, the concept of subordination of liabilities has a very different meaning in a non-securitization structure than it does in a securitization structure. In the former, subordination refers to the priority of legal claims against the issuer, if and when the issuer has defaulted. Consistent with this observation, Paragraph 452 of the Final Framework defines an obligor default as occurring when "The obligor is past due more than 90 days on <u>any material credit obligation</u> to the banking group." (Underline added).

In summary, an essential feature of securitization is the tranching of two or more liabilities into a hierarchy, such that the junior tranched securities will initially absorb losses on the underlying assets without disrupting the contractual payments to the more senior tranched securities. In contrast, in a non-securitization structure a default on any material liability, regardless of its seniority, is considered a default by the obligor on all its liabilities.

B) SIVs (Structured Investment Vehicles) - example of an investment vehicle that has characteristics of securitization.

According to a recent report from Moody's, "SIVs are high-grade, highly diversified structured credit vehicles that raise funds through the issuance of Prime-1 rated Commercial Paper, Aaa-rated Medium Term Notes and Capital Notes typically rated low investment grade."[4] The underlying pools of assets of SIVs have spanned a wide range: RMBS, auto loans, student loans, credit cards, etc. SIVs are characterized by issuing tranched short-term liabilities to fund longer term assets.

SIVs qualify as a form of securitization because they meet the three essential characteristics defined above: a) pooling of assets, b) funding of assets by tranched liabilities, and c) separation of assets from originators.

Let us now examine the characteristics of hedge funds and other leveraged investment funds and compare and contrast them to securitization structures.

C) Characteristics of a hedge fund and other leveraged funds that do not have characteristics of securitization.

A hedge fund is an investment fund that charges a performance fee and is open to a limited number of investors. The investors pay the managers of the fund a performance fee as compensation for the managers' skill at actively managing the underlying assets of the hedge fund to generate a high return to investors relative to risk.

The specific legal structure of a hedge fund will depend on the legal context of the investor. For investors subject to taxes, a hedge fund is typically set up as a partnership in which the managers of the fund are general partners and most investors are limited partners. A bank may be either a limited partner or a general partner of a hedge fund.

For non-profit investors, who are not subject to taxes, a hedge fund may be structured as a unit trust or an investment company. As banks are subject to taxes, we will focus this discussion on hedge funds set up as partnerships.

A hedge fund balance sheet has the following characteristics:

<u>Hedge Fund Liabilities</u>:

- Counterparty credit risk:
  - For OTC derivatives (which usually require margin) and

[4] "SIVs: An Oasis of Calm in the Sub-prime Maelstrom", Moody's, 20 July, 2007

        - For securities financing transactions (SFTs) (which always require margin).
    - Debt securities
        - Hedge funds rarely issue debt securities, but some do. However, the debt securities that are issued are not tranched with respect to each other or with respect to counterparty credit risk.

A hedge fund therefore does not have any tranched liabilities.

Hedge Fund Equity:

Since a bank is subject to taxes, it will invest in hedge funds set up as partnerships. The bank may be either a general partner in the fund (and have management responsibilities) or a limited partner. In either case, a bank's equity investment in a hedge fund is motivated by similar reasons to any other equity investments it makes: to earn a high return relative to the risks being taken.

In summary, an equity investor in a hedge fund is a general or a limited partner, who invests for the potential high return which results from the active management of the portfolio. In contrast, the first-to-default tranche of a securitization is the most junior tranche of the securitization hierarchy, which is the first to absorb losses on the underlying assets of the securitization structure. The investor in the first-to-default tranche benefits if the defaults of the underlying asset are less than expected.

D) Comparison of similarities and differences of operating companies, hedge funds and securitizations

Table 1, below, summarizes the similarities and differences of three entities in which a bank potentially could invest: a) an operating company (e.g., a software firm, another financial institution), b) a hedge fund, and c) a securitization structure.

As explained above, in section B, an investment fund that does issue tranched liabilities will have the characteristics of securitization and should be treated as such. However, hedge funds, and similar investment funds, do not issue tranched liabilities.

More broadly, as can be seen in Table 1, in its essential characteristics a hedge fund does not resemble a securitization structure. In many essential characteristics it is similar to other operating companies a bank might invest in.

An investment in a hedge fund should therefore be treated as a private equity investment not as an investment in a securitization tranche. The essential characteristics that differentiate a hedge fund (and similar leveraged investment funds) from a securitization structure are the following:

- Tranching of liabilities
    - A hedge fund does not issue tranched liabilities.
    - A securitization structure does issue tranched liabilities.
- Active vs. passive management of assets
    - The general partners of a hedge fund actively manage the composition and risks of the underlying assets, just as the managers of other operating companies do.
    - Most securitization structures have their underlying assets fixed at the time the structure is created.
- Motive for investing in equity of hedge fund or bank vs. motive for owning "equity-tranche"

    - An essential reason an investor chooses to invest in a hedge fund is the expectation of earning a high return (relative to risk), based on the reputation and skill of the hedge fund managers.
    - An investor who buys the first-to-default securitization tranche either a) had to buy and hold that tranche as the creator of the securitization structure b) thinks the realized credit losses of the underlying pool of assets will be low enough to make the investment worthwhile, or c) believes the expected excess return on the first-to-default tranche is high relative its risks.
- The primary drivers of risk in the investment:
    - For hedge funds, the primary risk is the fall of the market value of underlying assets. The magnitude of loss due to that fall in value will depend on the degree of leverage of the hedge fund and the potential illiquidity of its assets.
    - For securitization, the primary risk is the realized default experience of the underlying pool of assets.

For each of these characteristics, summarized in Table 1, a hedge fund is more similar to an operating company than it is to a securitization structure.

Table 1

Entity	Operating Company	Hedge Fund	Securitization Structure
Liabilities:	▪ Deposits ▪ CP ▪ Other debt securities ▪ Counterparty credit	▪ Counterparty credit for OTC derivatives and SFTs. ▪ Debt securities (rarely and non-tranched).	▪ Tranched securities
Equity:	▪ Common Stock	▪ General and limited partnerships.	▪ No equity as such. The "equity" tranche is the lowest rated component of the tranched liability structure.
Goal of investor in equity.	▪ Stock appreciation and dividend yield.	▪ Superior returns on investment, even taking risk into account.	
Goal of owning "equity tranche"			▪ A necessary component of tranched liability structure. ▪ Investor might be originator or a speculator who thinks realized default rate of underlying assets will be sufficiently low. ▪ Investor might think excess return is attractive relative to risk.
Active management of assets of entity	▪ Yes, by management of firm.	▪ Yes, by general partners.	▪ For most securitization structures there is no active management of the underlying assets once structure is set up.
Primary driver of risk	Depends on type of operating company. For a bank: ▪ For banking book: o ALM risk o Default risk ▪ For trading book o Changes in market price and market liquidity	▪ Changes in market prices and market liquidity, given leverage of fund.	▪ Realized default experience of underlying assets.

E) Proposed Treatment of investments in hedge funds and other leverage funds for the US.

Hedge funds, and similar types of leveraged investment funds, are in all essential characteristics (i.e., general asset structure, active and dynamic management of underlying assets by management, purpose of investor making an equity investment in fund) very different from securitization structures. They are more similar to other financial entities (e.g., commercial and investment banks, insurance firms, etc.) in which a bank may make an equity investment.

We propose that if a bank has investments in a diversified portfolio of hedge funds (or other leveraged funds), the Risk Weighted Assets (RWA) of those investments should be calculated under the rules for private equity investments, including the use of standard risk weights, internal models, or the look-through approach, as appropriate.

Diversification in this context should be evaluated by the characteristics of the funds that are invested in, such as: a) their range of strategies, b) the types of assets they invest in, c) the geographical dispersion of the underlying assets, etc.

We note that the standard risk weights for public and private equity investments implicitly assume a portfolio with some diversification benefit, just as the Basel II risk weight formulae for a loan explicitly assumes a portfolio of loans with a diversification benefit. If a bank invested in only one public or private equity, without any diversification, the standard risk weights (300% and 400%) might not be sufficient given the concentration of risk in that one investment. The appropriateness of the Basel II RWA for public or private equity investments will be evaluated under Pillar II by an examination of the bank's internal economic capital calculation.

Similarly, we think the appropriateness of the RWA assigned to hedge fund investments could be evaluated by the bank's supervisor(s) in the same way that the appropriateness of the RWA assigned to the overall portfolio of private or public equity are evaluated.

F) Treatment of investments in hedge funds in the CRD

On the basis of an analysis of the essential characteristics of hedge funds, and similar leveraged funds, we have argued that it is inappropriate for their RWA to be calculated under the securitization rules. In addition to this fundamental economic argument, a second argument against the proposal to treat investments in hedge funds, and similar leveraged funds, by the securitization rules is that it conflicts with the treatment of such investments by the CRD. The imposition of the requirement to use the securitization rules is thus both economically unjustified and will place US banks at a competitive disadvantage.

Under the CRD, investments in hedge funds, or other leveraged funds, are treated under the equity investments rules. Such investments are not risk weighted by the securitization rules.

Article 87 Par. 11 & 12 of the CRD indicate that if a bank is able to meet the conditions for a look-through approach as described in Annex VI Par. 77-81, then RWA should be computed in accordance with the IRB rules (in Articles 84-89) for the underlying exposures. Otherwise, the bank should apply the equity rules in Annex VII (IRB Approach) under either the simple risk weight and internal model approaches (Annex VII. Par. 17-26).

Under the CRD, the largest simple risk weight, 370%, is applied to the category "all other equity exposures".

G) Potential Arbitrage of Regulatory Capital

The question may be asked if a bank could reduce the Risk Weighted Assets for the "first-to-default" tranches of securitizations it owns by putting them into a leveraged fund, which the bank owned.

Let us first examine the conditions under which a bank could treat its transfer of first-to-default tranches to an SPV as a sale under FAS 140, when the bank had an equity investment in the SPV that acquired those tranches.

1. If a bank were to sell its existing first-to-default tranche positions into a vehicle to avoid securitization treatment, and then were to receive back an interest in that vehicle with the same risk profile, FAS 140 would not treat the original transfer as a sale and those assets would come back on the bank's balance sheet. As a result, it is not possible to avoid the securitization framework in this example.

2. If a bank were to establish a vehicle in partnership with several third parties and that vehicle then purchased various first-to-default positions from different third parties, the bank would need to receive a commingled interest in the vehicle to avoid consolidation under Fin 46.

3. If the bank were to receive an interest equivalent to specific assets in the vehicle (say one or two specific first-to-default tranches with the portfolio), this would be treated as a silo-ed interest and evaluated as a separate SPV under Fin 46. The result of which would almost certainly be consolidation.

Therefore, to receive the benefits of a lower risk weighting, a bank would have to be willing to share (and risk manage) a commingled pool of first-to-default tranches with the other equity holders in the SPV. We think it is unlikely most banks would be willing to do that. If, however, a bank did that and the SPV consisted only of first-to-default securitization tranches, the bank could and should be required to employ the look-through approach to assign a first-to-default risk weight (i.e., 1250%) to this particular equity investment.

In contrast, if a bank had equity investments in a diversified set of hedge funds, it should be allowed to treat its investments under the private equity rule, even if some of the hedge funds owned first-to-default tranches as part of their underlying pool of assets.

The standard for assigning a RWA to a hedge fund should not be the riskiness of any particular asset of any particular fund, but the diversified risk across the set of the equity investments the bank makes in hedge funds.

Regards,
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