Goldman, Sachs & Co. | 85 Broad Street | New York, New York 10004
Tel: 212-357-1231 | Fax: 212-428-3696 | e-mail: robert.berry@gs.com

Robert Berry
Managing Director
Market Risk Management & Analysis

Goldman Sachs

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Basel Committee on Banking Supervision
Bank for International Settlements
Centralbahnplatz 2
CH-4002 Basel
Switzerland

Dear Committee Members

"Proposed revisions to the Basel II market risk framework" and "Guidelines for Computing Capital for Incremental Risk in the Trading Book" ("IRC Guidelines")

The Goldman Sachs Group, Inc. ("Goldman Sachs") is pleased to have the opportunity to provide comments on these two consultative documents issued in July 2008 by the Basel Committee on Banking Supervision ("the Committee"). In doing so, we would like to express our appreciation of the efforts that have been made by the Committee, and by the members of the International Organization of Securities Commissions ("IOSCO"), to develop these proposals, the importance of which has been heightened by the financial crisis of 2007 and 2008.

Goldman Sachs remains fully supportive of an approach to capital adequacy that is fundamentally risk-based, as this most effectively aligns incentives for capital adequacy with good risk management practices and capital allocation discipline. We strongly support the development of the Basel II capital framework, and believe that – whilst further developments, such as those put forward in these consultative papers, will be required - the risk-sensitive Basel II framework is preferable to both Basel I and simple leverage ratio measures of capital.

We strongly support the overall direction of the Committee's proposals which we believe will strengthen both individual banks, and the industry as a whole. In particular, we support many of the changes to the VaR-based requirements (such as the requirements for risk factor identification and for frequent updates to the data used in the VaR calculation), the recognition that there is a need to calculate capital requirements that address risks not captured within 99%, 10-day VaR, and the principle of capturing equity price jump risk and credit spread risk, as well as default risk in the Incremental Risk Charge ("IRC").

Since April 2005, Goldman Sachs has been subject to consolidated capital adequacy requirements based on Basel II, supplemented by additional capital requirements. These additional requirements cover the risk of sudden jump-to-default (credit and equity positions), and severe price moves short of default in equity markets and in securitized mortgage positions. These requirements seek to cover our material mark-to-market exposures, and in particular those arising from credit risks. In the context of the Committee's proposals, it is worth noting that, in our experience, these capital requirements are significant, and considerably larger than the capital requirements resulting from VaR.

We believe that some aspects of the proposals could be strengthened, and have summarized these immediately below. In addition, Appendices A and B address other issues and the specific questions raised by the Committee.

We strongly support the extension of the Incremental Risk capital requirement to cover risks other than credit default. Rather than limiting the scope of the new IRC to specific additional named risks, we would encourage the Committee to set an overall objective that all material price risks to a bank's trading book should be captured. Whilst there would be a clear need to establish a longer-term implementation timeline to complete such a goal, this high-level principle would ensure that the IRC framework remains forward-looking.

More generally, we believe that the IRC framework would be stronger as a set of principles. There are a few examples (e.g. minimum liquidity horizons) where we believe the Committee is proposing a level of prescription that would limit the necessary flexibility that each bank needs to define its own risk management approach (albeit subject to regulator approval), and that would undermine the "use test" as it would require banks to build approaches purely for regulatory capital purposes.

We agree that the trading book *should meet a safety and soundness standard equivalent to that used for the banking book.* However, given the different horizon and risk profile of trading book positions, the more dynamic nature of risk *management* in the trading book, as well as different accounting, valuation and capital recognition treatments, the resulting capital requirement for a specific position held in the trading book *should, in general, be different to the same position held in the banking book.*

It is critical that positions be appropriately classified between trading and banking books, and this imperative will be undermined (and will lead to regulatory arbitrage) if the key differences in the risk profiles of these books is not recognized. To that end, we do not believe that a requirement to rollover positions to a one year horizon is appropriate for the trading book, since it does not reflect actual trading and risk management practice in stressed environments.

In combination, prescribed minimum liquidity horizons, and the incongruent rollover to a single, arbitrary horizon, will, perversely, deemphasise the illiquid, low-rated and concentrated positions the Committee is rightly most concerned about in the capital calculation.

An overall premise of a risk-based approach to capital must be that each risk is only capitalized once. On that basis we cannot support the proposal that the double counting of certain risks across VaR and IRC be ignored. This would actually undermine the relative contribution of VaR to capital, fail the "use test" and is inconsistent with capital treatments in other areas. We support the broad structure of the IRC, and allowing for individual banks to use internal models, we recognize that it is not possible to specify how double counting should be addressed; however, as a principle we believe banks should be allowed to adjust for double-counting effects, subject to regulatory approval.

It is clearly important that the IRC requirements (and more generally, the entire Basel II Capital Framework) are implemented in a manner that supports a level playing-field for competing banks across all jurisdictions. We believe that this can be achieved as part of the wider need to strengthen global regulatory structures.

Within a principles-based structure, and in an area of developing industry risk management practice, and given the importance of establishing a level playing-field, it is also important that regulators are able to validate banks' IRC models and the model parameters chosen. We believe that an ongoing program of hypothetical portfolio calculations across participating banks is the most sensible way to address these concerns.

In relation to the Committee's proposals on prudent valuation, we strongly support as a fundamental discipline the need to mark-to-market, but believe that the definition of prudent valuation should be synonymous with the concept of 'exit price', as recently clarified in the FASB Staff Position FAS 157-3 – "Determining the Fair Value of a Financial Asset When the Market for That Asset Is Not Active".

Further comments are provided below. In closing, we wish to repeat our support of the efforts of the Committee, and to express our desire to assist the Committee in any way that would be helpful.

Yours sincerely

Robert Berry
Chief Market Risk Officer

Cc: - Ms Norah Barger, Deputy Director,
Division of Banking Supervision & Regulation,
Federal Reserve System
- Mr Thomas McGowan, Assistant Director,
Division of Trading & Markets,
Securities & Exchange Commission
- Mr Paul Sharma, Director of Wholesale and Prudential Policy,
Financial Services Authority

Appendix A - Response to specific points raised in the "Proposed revisions to the Basel II market risk framework"

1. Implementation Timeline for IRC (paragraph 8)
Please see the response to Question 7 of the IRC Guidelines below.

2. Re-securitisations (paragraph 9)
Please see the response to Question 9 of the IRC Guidelines below.

3. Specification of market risk factors (718(Lxxv)(a))
We agree that VaR models should capture factors that are deemed relevant for pricing, but as a practical matter, we recommend that the sentence on nonlinear factors contains a recognition of materiality e.g. adding "a bank's model must capture all material components of nonlinearity" (this would be consistent with other areas of the framework such as the language for specific risk in 718(Lxxxviii), or be adjusted to note that "the value-at-risk model must capture nonlinearities <u>at the measured confidence level</u>".

Secondly, it would be helpful if the Committee could provide clarity that there may be other ways to incorporate certain risks in capital requirements, other than in a bank's VaR model i.e. that the objective is the inclusion of these factors in capital requirements generally, not narrowly or necessarily in the VaR model itself, and that this could be achieved through appropriately calibrated alternative add-ons. As it stands it is not clear what the fallback option is for a bank that does not have every single risk factor and all nonlinearities fully modelled within VaR.

4. Quantitative Standards (718(Lxxvi)(d))
In relation to the footnote that has been added, we request clarification that, where an alternative weighting scheme is used, it would be acceptable to use a multiplier for the purposes of determining the equivalent capital charge (given the importance of the Use Test).

5. Treatment of Specific Risk (718(xcii) and (xciii)) / Trading Book Soundness Standard
We believe that the objective outlined in paragraph 16 of the IRC Guidelines should be to achieve a consistent soundness standard, rather than an objective of achieving the same capital requirement – the latter ignores the differences in risk profiles of the books and will make the Framework more 'vulnerable to regulatory arbitrage' between trading book and banking book classification. Related to that, we would add that such a difference in capital treatment should only occur where the bank is able to demonstrate that it has appropriately classified its positions as "trading" or "banking" book, in line with the criteria established by the Committee in paragraphs 685-688 of the Basel II Framework.

Whilst a constant level of risk assumption *within the liquidity horizon of an individual exposure* may be appropriately conservative, we do not believe that a requirement to rollover positions to a one year horizon is appropriate for the trading book.

Whilst banks will aim to continue to provide liquidity to the financial markets where possible, it is unrealistic to assume that, in the extreme, a bank would not change its risk appetite. When a bank suffers increasing losses it is inevitable and appropriate that, as capital is eroded, it will attempt to reduce risk as quickly as possible to a level commensurate with the it's lower capital base.

Market participants (including investors, funding counterparties, rating agencies etc) will fully expect that a bank that has suffered severe losses accordingly reduces its risk until capital has been replenished. It is inevitable that, in extreme circumstances (as evidenced many times throughout the recent crisis), banks will not rebalance the type of illiquid, unhedged and/or concentrated positions that drive the IRC requirements.

What is critical though is that in any assessment of the appropriate level of capital, banks take account of areas such as liquidity and concentrations, and of their actual risk management practices. We suggest that the word "and" be deleted in 718(xciii) such that the soundness standard to be used would be "comparable to that of the internal-ratings based approach for credit risk as set forth in this Framework (i.e. a 99.9% confidence interval over a one-year capital horizon), under the assumptions of a constant level of risk, adjusted where appropriate to reflect the impact of liquidity, concentrations, hedging and optionality". *For the avoidance of doubt, this would mean that banks need not assume that risks with liquidity horizons of appropriately less than one year are rolled over to a one year horizon in their IRC requirements.*

Please see additional comments in the response to Q4 in the IRC Guidelines below.

6. Prudent Valuation Guidance

We support this section in principle but have the following observations:

a) We recommend that paragraphs 693 and 694 reference as the underlying principle for prudent valuations, the need to mark to 'exit price', as recently clarified in the FASB Staff Position FAS 157-3 – "Determining the Fair Value of a Financial Asset When the Market for That Asset Is Not Active". By definition, exit price takes all of the valuation adjustments listed in paragraph 699 into account.
b) In relation to the changes made in paragraph 695, this may have unintended consequences as drafted unless amended to take account of the practicalities of marking to market – for instance, where a listed position is hedged with an OTC derivative position, there may be valid reasons for marking both sides of this hedged position to the OTC derivative market (i.e. positions which economically hedge each other are marked to the most liquid market). We recommend that a footnote is added to note that there may be instances where it is appropriate not to use the listed price for a derivative that is more actively traded in the OTC market (banks should however still be able to justify the appropriateness and prudent nature of their marks).

Appendix B - "Guidelines for Computing Capital for Incremental Risk in the Trading Book" – response to specific questions raised by the Committee

Question 1 – Scope and Coverage

Under the proposal, the IRC would reflect all price risks except those directly attributable to movements in commodity prices, foreign exchange rates, or the term structure of default-free interest rates ("non-IRB market factors").

(a) Would it be preferable for supervisors to list specific types of events that must be captured (eg defaults, migrations, and only certain types of movements in credit spreads and equity prices)? What should be the basis for determining which types of events would be included, and how could the Committee ensure that the framework was not largely backward looking?

(b) Would it be worthwhile to expand the scope and coverage of the IRC to capture price risks associated with commodity prices, foreign exchange rates and the term structure of default-free interest rates?

We believe that the overall IRC framework should be principles-based, providing sufficient clarity that it supports a level playing-field, but allowing banks enough flexibility to design the most appropriate risk management and modelling processes suitable to their bank.

We support the Committee's proposals to expand the scope of the IRC to cover more than just credit default risk, and to capture other price risks in the trading book. We believe that the IRC should go further and be structured to capture each bank's material price risks (including commodity, foreign exchange risks etc).

To that end, and in order to remain forward-looking, we believe that the scope of the IRC would be best established from inception as an overall principle that all material price risks should be included in the total capital requirement:

- We see no prudential reason why some risks would be included in the IRC and others excluded.
- Including only some risks could create issues in calculating IRC given correlations between "in-scope IRC market factors" (e.g. interest rates) and "non-IRC risk factors" (e.g. foreign exchange rates).
- We think it makes sense to recognize that risks that are material to one bank may not be the most relevant to another.

Once the overall principle for scope has been determined, we believe that there would then be no need to list the types of events and risk factors that need be captured, since there would be no assurance that this would remain a complete list over time (though we recognize that there may be some value in having some guidelines for the purposes of regulatory consistency across jurisdictions). We would therefore recommend that the text in paragraph 11 of the IRC Guidelines from "except those positions..." is removed, likewise paragraph 15 would become redundant, and paragraph 17 would need to delete the section in brackets.

As noted, we believe that it is appropriate that all price risks are capitalized within the total capital requirement, but that it is not necessary to prescribe exactly how each risk needs to be captured e.g. some banks may include migration risks within VaR, others may determine that such risks are more suitably included in the IRC.

Within this overall principle, the Committee should set a phased implementation timeline along the lines proposed (see also response to Q7 below). We agree that all banks should first implement the IRC with respect to Default Risk, before moving on to other risks. In terms of remaining timelines, whilst some broad parameters should be set by the Committee, we believe that, given different risk factors may be more or less material to different banks, regulators should be able to agree appropriate timelines for each bank.

Question 2 – General vs Specific Risks
For covered IRC positions, Pillar 1 charges would depend in various ways on three types of risks: general market risks and specific risks, as defined under the current MRA, and IRC covered risks. Are the differences among these types of risks clear and measurable?

Please see comments the response to question 3 on double-counting.

Question 3 – Double-counting adjustments
While the capital horizons and confidence levels underlying the IRC and the 10-day VaR charge would differ, the risk factors captured by these risk measures would overlap to a significant degree. However, any adjustments to offset double-counting would complicate the framework and diminish the Pillar 1 importance of the 10-day VaR calculations including incentives to estimate the 10-day VaR as accurately as possible. Is it possible to provide double-counting adjustments that do not raise such concerns? How?

We believe that it is critical that banks should be allowed to adjust for the double-counting impact of certain risk factors being incorporated into both VaR and IRC, provided that they satisfy regulators on their methodology for how this is done. In a risk-based capital regime, individual risks should in principle only be captured once within capital requirements. This is important in the context of the "use test" (e.g. for the purposes of banks' capital allocation processes) and to avoid the creation of regulatory arbitrage between the trading and banking books.

We also do not agree that (as suggested in paragraph 36) that reducing the IRC to eliminate the effects of double-counting would diminish the prominence of VaR and weaken incentives with respect to day-to-day risk management measures. We do not believe that removing double-counting would create such perverse incentives (more likely if banks are not allowed to remove the effects of double-counting), but also in our experience, the IRC-based requirements are significantly larger than VaR so reducing the size of IRC will *increase* the prominence of VaR in the capital requirements.

Question 4 – Capital horizon and confidence level

The proposal stipulates that an IRC model incorporate a one-year capital horizon, a 99.9 percent confidence level, and a liquidity horizon appropriate for each trading position.

The Committee recognises that such an approach could present considerable practical challenges, including the need for data to calibrate key parameters.

(a) What alternative guidelines would achieve the Committee's objectives, but in a manner that would be less costly or difficult to implement?

(b) Given the current state of risk modelling, is it feasible to estimate the portfolio loss distribution (excluding non-IRC market factors) over a one-year capital horizon at a 99.9 percent confidence level?

(c) Would it be worthwhile to allow banks to use a single horizon for all covered positions (e.g. three months) and a lower confidence level (e.g. 99 percent), together with a supervisory scaling factor that was calibrated to achieve broad comparability with the IRB Framework for the banking book? Would such an approach be as useful for internal risk management purposes as the proposed IRC?

Please refer to comments above which set out why we believe that an assumption that trading book positions are rolled over to maintain a constant level of risk over one year is inappropriate in a mark-to-market environment.

In addition, we do not support the imposition of a prescriptive minimum liquidity horizon of one-month – this is inappropriate for positions such as many listed equity indices, Eurodollar futures etc, and it would create a severe dislocation with the Committees requirement that the IRC be subject to the Use Test. In addition, it would result in these types of positions dominating the IRC capital requirement, whereas to address the risks in the tail, it is the illiquid, low-rated and/or concentrated positions that should be driving bank's IRC requirements.

We strongly urge the Committee to adopt a principles based approach in this area, with banks being required to justify their assumptions and liquidity horizons. We therefore support the principle set out in paragraph 28 (longer liquidity horizons for concentrated positions), and believe that the prescriptive nature of paragraph 29 is unnecessary.

In relation to part (b) of the question, in terms of modelling risks over a one-year capital horizon at a 99.9% confidence level, we would note that the primary impediment is not so much the state of risk modelling, but the absence of adequate data sets that would be required to model risks for one-in-a-thousand-year events.

With respect to part (c) of the question, we believe that it *may* be appropriate to use a single horizon for all positions and then simply scale up from a lower confidence level, although care needs to taken to ensure that the resulting increase in capital requirements would be appropriately targeted at the more concentrated, illiquid and low rated positions that the Committee - and internal risk management - is concerned about.

Finally, on hedging (paragraph 31), we believe that the test here should be focused on mismatches in the liquidity horizons of positions that are being hedged and offset, rather than on maturity mismatches, which is only one component of this.

Questions 5 and 6 – Validation

5. Given the IRC soundness standard of a one year time horizon and 99.9th percentile loss, the Committee seeks comment on how the resulting risk measure might be validated quantitatively. For example, would it be reasonable to validate the underlying model at shorter horizons and/or at lower percentiles? If so, how might one ensure that the validation exercise is relevant for the one year 99.9th percentile standard? Also, would different aspects of the model likely require different validation approaches?

6. The flexibility built into the proposed IRC potentially could make Pillar 1 charges for trading positions less comparable across banks. How might the framework ensure greater comparability without unduly limiting firms modelling choices? In particular, would it be productive to require banks to calculate risk measures for standardised test decks of trading portfolios, which could be used to compare model results across banks

It is vitally important that these requirements are implemented with a level playing-field, so it is critical that banks' IRC approaches are capable of being validated. Given the degree of model error likely at such a high soundness standard, we believe that it could be appropriate to validate at a lower percentile and extrapolate, provided that regulators are comfortable with the key parameters of the model, particularly the chosen liquidity horizons.

In relation to correlation assumptions (paragraph 38), we believe that these are likely to be subject to a wide range of estimates, even if supported by objective data. We would request that a clarification be added to note that it would be acceptable for banks to use correlation assumptions as constructed by supervisors elsewhere (e.g. in the Advanced Internal Ratings Based approach).

Given the importance of the level playing field, and of regulators being able to validate the models used for the IRC calculations, we believe that it would be appropriate for regulators to run an ongoing program of hypothetical portfolio calculations / standardised test decks across participating banks, and that these would be part of an ongoing conversation between banks and regulators on the models and parameters used. This could also be used to provide valuable feedback to banks, and would ensure that the overall process was forward-looking.

Question 7 – Implementation timeline

Is the proposed implementation schedule feasible? If not, which IRC guidelines, and what specific types of positions or risk factors, are most problematic?

Overall the proposals represent an ambitious framework. We agree with the Committee's proposals for a phased timeline for implementation. We believe the first priority should be for banks to model Default Risk, which would be a test case and learning curve for banks and regulators alike, before moving onto other event risks.

In terms of the implementation timeline beyond Default Risk, we believe that each bank should agree a timeline for implementation with its primary regulator, within overall globally consistent parameters, to complete this, depending on the most material risk factors and event types to be modelled for each bank.

Question 8 - Disclosures
What additional Pillar 3 disclosures related to the IRC, or the trading book more broadly, would be helpful to market participants and contribute to market discipline?

We support appropriate disclosure in this area in due course.

Question 9 – Interim treatment for re-securitisations
Paragraph 50 requires a capital charge for re-securitisations. This would start on 1 January 2009 and last until the IRC has been implemented for these positions. Would it be worthwhile to expand the scope of these positions to all securitisations?

It would be helpful if the Committee could clarify that, until the point that a bank has implemented IRC for both default and migration credit risks, rather than implementing the Securitization Framework, it would be acceptable for banks to use an alternative methodology provided that the resulting capital requirement was similarly conservative.