Multidisciplinary Working Group on Enhanced Disclosure

Final Report to

Basel Committee on Banking Supervision
Committee on the Global Financial System of the G-10 central banks
International Association of Insurance Supervisors
International Organisation of Securities Commissions

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Multidisciplinary Working Group on Enhanced Disclosure

1. Summary and recommendations

This report contains recommendations for improving the public disclosure practices of financial intermediaries. These recommendations are being put forward by a Multidisciplinary Working Group on Enhanced Disclosure (the Working Group), jointly sponsored by the Basel Committee on Banking Supervision (BCBS), the Committee on the Global Financial System of the G-10 central banks (CGFS), the International Association of Insurance Supervisors (IAIS), and the International Organisation of Securities Commissions (IOSCO), and are addressed to the Working Group's sponsoring organisations for their consideration.

The Working Group's recommendations for improving the state of disclosure practices fall into three categories. First, the Working Group recommends a specific set of disclosures that should be provided by financial intermediaries that incur a material level of the relevant financial risks, through periodic reports to their shareholders, creditors and counterparties. Second, the Working Group has identified other disclosures which could be informative but with respect to which further investigation is necessary of their costs and benefits or precisely how they should be made. These issues should be capable of resolution in the near term. Third, the Working Group identified certain areas where quantitative information would fill an important gap in disclosures, but for which further development of risk assessment concepts and methods are necessary before practical disclosures could be considered. The Group envisions that efforts in the last two categories would involve collaborative endeavors by the authorities across financial sectors along with private sector efforts as appropriate. Each set of recommendations is summarised below and described in the body of this report.

In response to growing interest in the international regulatory and central banking community in how market discipline can play an important role in maintaining financial market stability, the Working Group was established in June of 1999 to provide advice to its sponsoring organisations on steps that would advance the state of financial institutions' disclosures of financial risks in order to enhance the role of market discipline. The Working Group conducted a pilot study in which forty-four private sector financial institutions, comprising a broad cross section of financial firms from nine countries, voluntarily provided confidential data from the second quarter of 2000 about a broad range of financial risks. The pilot study data served as a vehicle for the Working Group to establish a concrete and factual discussion with the participating firms about disclosure concepts, helping the Working Group to arrive at its conclusions. While the Working Group benefited immensely from the dialogue with the participating firms, and from the support of a number of other supervisory authorities, the conclusions and recommendations in this report are those of the Working Group alone.

The Working Group reached three broad conclusions about the challenge of improving financial disclosure practices which inform the Group's specific recommendations.

First, in order for public disclosures to provide a more meaningful picture of the extent and nature of the financial risks a firm incurs, and of the efficacy of the firm's risk management practices, it is necessary that there be a healthy balance between quantitative and qualitative disclosures. Disagreements do not occur about this principle but tend to focus on how this balance is achieved.

Second, disclosures should be consistent with firms' own risk management practices. Where the Working Group has focused on specific elements of risk, firms should frame their disclosures regarding these elements in ways determined by the internal parameters and exposure categories that firms use to assess and manage their risks when meaningful comparability can not be achieved. While comparability is an important objective, it is recognised that this will not always be practicable.

Third, information about intraperiod exposures – particularly in the form of high, median and low observations – can provide a more meaningful view of a firm's risk profile than period-end data alone. Much of current disclosures still rely on period-end information that permits window dressing of the information provided to creditors and investors.

Recommended disclosure practices regarding financial risks

The universe of financial intermediaries to which the Working Group's recommendations are intended consists of banks, securities firms, insurance companies and leveraged investment funds (hedge funds). As described below in Section 5 and illustrated in Annex I, the Working Group believes that these financial intermediaries, regulated and unregulated, should periodically disclose the following quantitative information, when material, in a way that in the firm's judgement most meaningfully expresses its exposures to financial risks.

1. For actively managed or marked-to-market exposures such as trading activity, (i) intraperiod high, median and low, and period-end value-at-risk (VaR) of the relevant portfolio disaggregated by significant risk or asset classes and in the aggregate; and (ii) aggregate performance information about risk and return including a comparison of risk estimates with actual outcomes.

2. For firms in which institution-wide assessments of market risk are used in the firm's internal risk management and for which the firm has confidence in the risk assessment, a measure of firm-wide exposure to market risk that integrates assets and liabilities and off-balance sheet exposures across the entire institution reported in terms of median, high, and low values over the reporting period and at period-end.

3. Substantive qualitative discussion of funding liquidity risk that includes some quantitative information supporting the discussion.

4. The amount of credit exposures broken out by type of exposure or business line, credit quality, and maturity, using breakdowns or definitions that reflect the nature of the institution's exposure to credit risk.

This information is already being disclosed in varying extent by many financial institutions and the Working Group believes that *all* financial intermediaries can and should include these items in routine periodic disclosures, with respect to those items where they experience material levels of the relevant risk.

As a first step, the Working Group recommends that the four sponsoring organisations encourage all regulated financial intermediaries to move promptly to make routine, periodic disclosures of the four items identified above to their shareholders, creditors and counterparties. The Working Group also recommends that the sponsoring organisations work with the relevant bodies to explore the advisability of including these four items as part of the disclosures provided with accounting statements, given their relevance to the financial condition of any financial intermediary. Ultimately, however, if progress through these two channels is seen as falling short of what is needed to strengthen market discipline, the Working Group would recommend that those supervisory and regulatory authorities in a position to mandate disclosure practices take the steps necessary to require the public disclosure of these items by the appropriate regulated financial intermediaries.

With respect to leveraged investment funds (hedge funds) that do not routinely make periodic public disclosures of a broad range of their financial information, the Working Group recommends that the sponsoring organisations encourage these firms to provide the items above when material, on a routine, periodic basis to their investors, creditors and counterparties. To the extent that these firms do not come to disclose this information, the Working Group recommends that the relevant supervisory and regulatory authorities consider requiring such disclosures, to the extent appropriate and consistent with the applicable regulatory regime. The information when material should also be considered to be a minimum of what would be expected in bilateral disclosures when judging the adequacy of regulated firms' risk management arrangements for dealing with such firms.[1]

The advisability of other disclosures

Risk concentration. Given the importance of risk concentrations and the role of correlation assumptions whether explicit or implicit in all measures of risk, the Working Group recommends that the sponsoring organisations consider further efforts by the

[1] / For certain types of trading counterparties, prudent credit risk management would require more information than this minimum. For further discussion, see Improving Counterparty Risk Management Practices, by the Counterparty Risk Management Policy Group (CRMPG), June 1999.

public sector with appropriate private sector involvement on the means of expressing vulnerability to risk concentrations in market, credit, and insurance risks.

Credit risk. With regard to information relating to credit quality, the Working Group recommends that the sponsoring organisations undertake a concerted effort, with appropriate input from the private sector, to define (i) how loss mitigation arrangements could be consistently reflected in showing the amount of credit exposure and ratings of credit quality, and (ii) how performance measures relating to credit risk could be enhanced and made more timely by, for example, information about migration of current exposures across credit rating classes, or by information on the performance of the ratings of credit quality.

Development of risk assessment concepts and methods

The Working Group believes that the private sector can continue to make important contributions in two areas by (i) further developing risk assessments that take account of market liquidity and considering how such measures could be used in disclosure of market risk, and by (ii) further developing broad principles for the assessment of funding liquidity risk as a first step towards quantitative disclosure of such risks. Each of these would be areas where private sector industry groups or committees of market participants could usefully cooperate, with input from public authorities, in developing the conceptual frameworks for future enhancements of public disclosures.

As a longer-term objective, the Working Group encourages the sponsoring organisations to pursue an open-ended collaboration with the private sector to (i) review or develop best practices for disclosures of firm-wide exposures to market risk, and (ii) develop concepts for the measurement and disclosure of potential future credit exposure at a firm-wide level.

After a review of the background of this project and the objectives of disclosure and the pilot study in the next two sections, the conclusions and recommendations are described more fully in Sections 4 and 5. Annex I contains an illustrative example of the recommended disclosures, Annex II presents results from the pilot study, Annex III shows the participants in the pilot study, and Annex IV contains a glossary of terms.

2. Background and history

The Multidisciplinary Working Group on Enhanced Disclosure was established in June of 1999 by the Basel Committee on Banking Supervision (BCBS), the Committee on the Global Financial System of the G-10 central banks (CGFS), the International Association of Insurance Supervisors (IAIS), and the International Organisation of Securities Commissions (IOSCO) to assess the feasibility and utility of enhanced public disclosure by financial intermediaries. This initiative was the latest in a series of projects

that have endorsed and advocated the use of quantitative information about financial risks in public disclosures. [2]

In 1994, following disturbances in G-10 government securities markets, a working group of the then Euro-currency Standing Committee produced a discussion paper on disclosure of market and credit risks by financial intermediaries.[3] The report recommended that all financial intermediaries should disclose quantitative information about their market and credit risks and their risk management performance in their trading activities. The report emphasized that these disclosures should be drawn from risk assessments that were actually used by a firm in managing its risks, and that performance information should be provided as well to allow for comparison of firms' relative risk management performance over time.

In the fall of 1998, with an emerging consensus within the international regulatory and central banking community that market discipline can play an important role in maintaining financial market stability, another working group of the Euro-currency Standing Committee was asked to explore and identify the steps necessary to implement good practice for the disclosure of information that would provide an accurate picture of an institution's exposure to financial risks. That working group concluded that financial markets would be more transparent and market discipline would be more effective if the disclosure of financial risks were practiced by all institutions engaged in trading, investment and lending activity. Given the international scope of today's financial markets and the blurring of distinctions between institutions with different legal or regulatory charters, that working group recommended that further efforts on disclosure should be carried forward by a group comprised of representatives from a wide range of official sector organisations and regulatory or supervisory authorities. To provide for a more factual analysis of the issues, that group also recommended that the new group conduct a pilot study of disclosure concepts with a broad cross section of financial intermediaries spanning both national and industry borders.

In June of 1999, the Multidisciplinary Working Group on Enhanced Disclosure (the Working Group) was formed to conduct a pilot study to provide a factual analysis of issues and problems relating to enhanced disclosure of financial risks. A key component of the pilot study was the participation of private sector institutions in the development of a template for quantitative disclosures to be used in the pilot study and in discussions of the results of the study. While the Working Group has benefited immensely from the dialogue with the private sector institutions, the conclusions are those of the Working Group alone.

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[2] / Disclosure in this report refers to the provision of information about financial risks to investors, creditors, and counterparties. This information is different from, but complementary to, data about an institution's current financial condition, and as such requires the use of risk management type information instead of traditional accounting information. For further details on risk management type information in disclosure see Public Disclosure of Market and Credit Risks by Financial Intermediaries, (Fisher Report), a discussion paper by the Euro-currency Standing Committee of the Central Banks of the G-10 countries (ECSC), Bank for International Settlements, September 1994.

[3] / ECSC (1994).

This project on disclosure is related to a number of other current or recent endeavors in the private and public sectors that while undertaken for different immediate purposes are generally consistent with the efforts of the Working Group. The Counterparty Risk Management Policy Group was a private sector initiative in 1999 that described credit risk management practices, including information sharing, that dealers and market makers should practice with regard to their trading counterparties, and with hedge funds in particular.[4] Their report made a number of important conceptual contributions, especially in the area of assessments of funding liquidity risk and leverage. The report, however, did not recommend public disclosure. Towards that objective, another private sector group, the Working Group on Public Disclosure (Shipley Group) issued a report on strong disclosure practices by banks and securities firms.[5]

In the public sector, the Basel Committee on Banking Supervision considers market discipline to be one of the three essential foundations of its new capital adequacy framework.[6] The Basel Committee intends to encourage market discipline by developing a set of disclosure recommendations and requirements to provide market participants with key information to assess the adequacy of a bank's capital relative to its risk exposures. Moreover, the use of internal methodologies for measuring credit risk for regulatory capital requirements would be conditional on the disclosure of information about credit quality. The disclosure recommendations of the Working Group as they would affect banks are generally consistent with those of the Basel Committee.[7]

3. Objectives of disclosure and the pilot study

Objectives of disclosure

The subject of this report is the disclosure by financial intermediaries of information about their exposure to financial risks. The Working Group believes that more extensive disclosure can increase market discipline and may increase the stability of the financial system and lead to an improved allocation of capital and other resources. Greater transparency could allow participants in the financial system to make more informed judgements about risk and return and to place new information in context. For example, there could be less likelihood that individual adverse news items about firms

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[4] / Improving Counterparty Risk Management Practices, Counterparty Risk Management Policy Group (CRMPG), June 1999.

[5] / See: Federalreserve.gov/boarddocs/press/general/2001/20010111/DisclosureGroupLetter.pdf. This effort began in early 2000 with the interest of the regulatory authorities in advancing the role of market discipline in banking and also developing guidelines for bank examiners' review of the disclosures of large banks as part of the evaluation of bank management. See page 2, Improving Public Disclosure in Banking, Federal Reserve System Study Group on Disclosure, Staff Study 173, Federal Reserve Board, March 2000.

[6] / The three pillars of the capital adequacy framework are: minimum capital requirements, the bank supervision process, and market discipline. See, A New Capital Adequacy Effort, Consultative paper issued by the Basel Committee on Banking Supervision, Bank for International Settlements, June 1999.

[7] / See, Pillar 3: Market Discipline, Supporting document to the New Basel Capital Accord, Bank for International Settlements, January 2001. Portions of the disclosure template used in the pilot study were based on work on disclosure conducted by the Basel Committee.

will be assumed to be symptomatic of hidden fundamental problems. More generally, with greater transparency there may be less tendency for markets to place undue emphasis on positive or negative news and, in this way, volatility in financial markets and an important source of fragility may be reduced.

The changing structure of financial intermediation has strengthened the case for enhanced disclosure as capital markets and traded securities are playing a greater role in the allocation of capital and risks in the financial system. The substitution of tradable debt securities for bank lending and greater use of risk-shifting financial instruments have reduced the importance of banker/client relationships while expanding the role of publicly available information and market prices in the allocation of capital. With more investors and creditors relying on direct investment and trading opportunities rather than on the products of intermediaries, the diversity associated with a more direct and less intermediated allocation of capital arguably produces a more innovative and robust financial system, and certainly one in which the wide dissemination of financial information plays an important role.

The motivation for the level of detail and scope of the recommendations below is that for investors to make better informed choices they need information about the nature of the risks in their investments and the distribution of those risks. As the typical investor may have exposures to more than one institution, an understanding of the risk concentrations in an investor's total exposure can only be derived from disclosures of the risk profiles of each of the institutions concerned. These considerations suggest that disclosure of financial risks should describe an institution's risk profile with sufficient granularity, and also be practiced by a broad range of financial institutions. In addition to information about risk profiles, information that reveals the efficacy of a firm's risk management is also an important element of disclosure as firms' efficient management of risk has an important influence on the balance of risk and return facing investors.

Pilot study objectives

The objective of the pilot study was to determine the practical steps that could be taken to enhance the state of disclosure regarding financial risks. The Working Group hoped to determine what type of information about risks would be useful and practical for financial intermediaries to begin to disclose in the near term and to identify areas where further efforts to develop disclosure concepts would be most productive.

In the pilot study forty-four institutions comprising a broad cross section of financial institutions from nine countries provided confidential data from the second quarter of 2000 about their financial risks using a common template.[8] The pilot study data served as the vehicle by which the Working Group established a concrete and factual

[8] / The initial drafting of the template drew on disclosure concepts from a number of sources, ranging from the best examples of current disclosures, the CRMPG (1999) report on Improving Counterparty Risk Management Practices, and work conducted by the Basel Committee on Banking Supervision (e.g. Best Practices for Credit Risk Disclosures, Basel Committee on Banking Supervision, Bank for International Settlements, July 1999).

discussion with the participating firms about disclosure concepts, helping the group arrive at its conclusions. The Group benefited immensely from these firms' knowledge on disclosure issues in their comments and suggestions on the template used in the pilot study and the discussion with them after the template data were collected.

Enhancing the state of disclosure is not a straightforward matter, as generating more detailed and informative disclosures would impose costs on firms, particularly in the early stages, and also raise concerns about how such information could hamper commercial objectives by revealing proprietary information. In addition to achieving the right balance between costs and benefits, the ideal disclosures should be consistent with a firm's risk management and business practices while also allowing meaningful comparisons to be made across firms. The pilot study was an attempt to conduct a considered and factual analysis of these issues in a collaborative exercise with the participating firms.

Much was learned through the study about differences and similarities across sectors. For example, some commonality in the approaches to risk measurement and a trend towards convergence in the general framework was observed even though there were differences in methodologies. Some of these differences reflect intrinsic differences across financial sectors such as in time horizons for risk management or the availability of data (for example, on long-tail losses for insurance risk). In certain areas common cross-sectoral approaches in assessment of risk were identifiable, such as the use of credit ratings for credit risk, while in other areas less commonality was found, such as for firm-wide structural exposures to market risk. Different sectors are at different stages in the evolution of market risk measures and have different levels of confidence in the appropriate measure of market risk or indeed what measure to use.

4. Conclusions

The conclusions of the Working Group have three general themes: first, a healthy balance is necessary between qualitative and quantitative disclosures; second, intermediaries' disclosures should be consistent with how they assess and manage their risks; third, intraperiod information is necessary for a more complete view of an institution's exposure to risk.

Quantitative information. Financial intermediaries should disclose quantitative information describing their exposures to financial risks and the efficacy of their measurement and management of those risks. Qualitative discussion is also an important and necessary component of disclosure as it can contribute context and perspective that quantitative information cannot provide. However, qualitative discussion alone is not sufficiently informative, and quantitative information is an essential foundation to which the qualitative discussion can speak.

Consistency with internal risk assessment practices. Institutions' disclosures, in practice, should be consistent with how they assess and manage their risks. These

disclosures should show how a firm's risk profile changes over time, and also provide sufficient information so that a firm's performance in expressing its exposures to risk and in managing its risks can be assessed over time. While not always attainable, disclosure on a comparable basis when consistent with internal risk management practices would be the most promising means towards improvements in market efficiency, and this principle should underpin the way in which the recommendations of this report are taken forward by regulatory and industry groups. To move forward it will be necessary to strike an appropriate balance between the aspiration of comparability and the imperative to achieve significant advances in disclosure, even if on a more institution-specific basis. Investors regularly compare the relative prospects of the institutions to which they provide capital and funding, and information that over time could help them make better informed judgements about firms' relative risk and return profiles might be helpful even if it is not directly comparable.

Intraperiod information. The disclosure of intra-period observations – in the form of high, median and low values – for disclosure items currently made by most financial intermediaries, as well as those recommended here, would improve understanding of the nature and level of risks being born by individual financial intermediaries.[9] The use of intraperiod information would be most useful for actively managed financial risks. At the current state of risk management, intraperiod information should be provided for actively managed marked-to-market exposures such as trading activity (See Chart 1 in Annex II for relevant results from the pilot study). For other risks, such as credit risk, the trading instruments and markets that might allow for more active management and modification of exposures have not yet reached a level of development that would make intraperiod information useful. However, as the means to trade credit risk and liquidity of the credit markets evolve, at some point in the future the issue of intraperiod information about credit exposures should be revisited.

The Working Group believes that improvements in disclosure are more likely to be successful if they are developed in a collaborative exercise between the public and private sectors, including users of disclosure information. The private sector possesses the expertise and insight that is necessary for the development of meaningful disclosure concepts. The recommendations on possible further steps could provide a concrete basis for advancing a dialogue on disclosure between the public and private sectors and also among the authorities in different financial sectors.

The conclusions and recommendations are intended for a universe of financial intermediaries consisting of banks, securities firms, insurance companies and leveraged investment funds (hedge funds). While market discipline is most effective when more rather than fewer institutions disclose information about their risk and return profiles, cost and benefit considerations relating to such disclosures may be influenced by a firm's size. As each pilot study participant was among the larger institutions in its class, the Working Group did not address how or whether a firm-size threshold should apply to the recommended disclosures. The appropriate extent for application of the

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[9] / Excessive emphasis on period-end information can create incentives for window dressing (the manipulation of positions around disclosure dates).

recommendations to smaller firms might therefore need to be considered by each sponsoring organisation.

5. Recommendations

The recommendations below fall into three groups. First, the Working Group recommends a specific set of disclosures that financial intermediaries with material amounts of the relevant risk should provide to their shareholders, creditors and counterparties. Second, the Working Group has identified information whose disclosure would, in principle, be informative but further investigation of the costs and benefits involved should be undertaken by the public sector to determine whether such disclosures would be advisable or precisely how they should be made. These issues should be capable of resolution in the near term. Third, the Working Group also identified areas where quantitative information would fill an important gap in the disclosure of the risk profile of a financial intermediary but further development of risk assessment concepts and methods are necessary before meaningful disclosures could be considered. With respect to the last two categories, the Working Group describes the steps that could be undertaken to help resolve open issues. In these, the Group envisions that the work would involve collaborative endeavors by the authorities across financial sectors along with private sector efforts as appropriate.

Recommended disclosures

In the recommended disclosures of financial risks, firms should rely on their own internal parameters and exposure categories, consistent with the specified elements of risk. Along with the data, the appropriate qualitative information for readers to understand the key assumptions and methodologies and to explain outlying observations should also be provided. The information should be disclosed periodically and in a timely manner. While quarterly reporting is the norm in some but not all countries, semi-annual disclosure of this information would constitute a minimum frequency. The recommended disclosures include information that is already being disclosed in varying extent by many financial intermediaries. While few, if any, institutions currently disclose all this information, examples of many of the items can be found in some firms' disclosures.

Qualitative Discussion

Qualitative discussion is an important feature of public disclosures because it can provide context for interpretation of a firm's risks and how they are managed. Qualitative discussion alone, however, is not sufficiently informative, and quantitative information is an essential foundation to which the qualitative discussion can speak.

Disclosure of:
Discussion of the institution's exposures to financial risk and how they are managed. In addition, a description of the scope and nature of the firm's quantitative data about its risks, including descriptions of those positions, exposures, or activities that are not reflected in the risk measures or quantitative data.

Quantitative Information

The following quantitative information, when material, should be disclosed in a way that in the firm's judgement most meaningfully expresses its exposures to risk. (See Annex I for an illustration of the recommended disclosures.)

I. Market Risk

I.A Trading activity or actively managed marked-to-market exposures

All financial intermediaries that engage in trading activity or actively manage their marked-to-market exposures ought to disclose measures of market risk in that activity. This information should be provided for the aggregate exposure and also broken out by risk or asset classes that describe the disparate risks that the institution derives diversification benefits from in its aggregate measure of risk. The disaggregation could be either standard risk categories such as equity, fixed-income, currency, commodity risk, and diversification effects, or some other disaggregation (by risk type or business unit) that better describes an institution's risk profile.

Disclosure of:
Value-at-risk (VaR) of the relevant portfolio, broken down by type of risk or asset class and in the aggregate, estimated for one-day and two-week holding periods, and reported in terms of the high, median and low values over the reporting interval and at period-end.

To assess the efficacy of their risk management and expressions of their exposures to risk, financial intermediaries should provide information about risk and return, including a comparison of their risk estimates with actual outcomes.

Disclosure of:
For the portfolio covered by the risk estimates above, information about risk and return in the aggregate; including a comparison of the risk estimates with actual outcomes, such as a histogram of daily P/L divided by daily VaR, or some other representation of the relationship between daily P/L and daily VaR.

Qualitative discussion to help in the comparison of the P/L and risk measures, including a description of differences between the basis of the P/L and the basis of the VaR estimates.

In light of differences in the basis or definitions of risk assessments and how performance is measured, financial institutions over time should strive for better alignment of the definitions or basis of performance measures and risk measures and provide an appropriate level of granularity in such information. Given the importance of risk assessments and performance information for risk management, the Working Group believes that better alignment of performance measures with risk measures is important for both internal risk management and improving the meaningfulness of the public disclosures of individual financial institutions for whom trading activity is a substantial part of their business.

I.B Institution-wide exposures to market risk

Financial intermediaries that use a firm-wide assessment of market risk in their internal risk management and have confidence in the assessment should disclose such firm-wide measures of market risk. The assessment should integrate assets and liabilities and off-balance sheet exposures across the entire institution. If the market risk in trading activity or marked-to-market exposures is managed separately from firm-wide exposures to market risk, then that activity would be excluded from these risk measures and reported separately (as in Section I.A), and the remaining exposures to market risk would be reported here.

Disclosure of: Quantitative measure of firm-wide exposure to market risk broken down by type of risk, that in the firm's judgement best expresses its exposure to risk, reported in terms of the high, median and low values over the reporting period and at period-end.

II. Funding Liquidity Risk

Funding liquidity is fundamental to the assessment of risk and, as such, is an important subject for disclosure. The concept is very difficult to quantify in a meaningful way for disclosure, however, and it is recognised that disclosure in this area needs to be considered carefully in order not to provide misleading and potentially damaging information. This challenge accounts for why qualitative discussion is currently the extent of most disclosures of funding liquidity risk. To strengthen these disclosures, financial intermediaries should look for ways to meaningfully supplement their qualitative discussion with quantitative information relating to that discussion.

Disclosure of: Qualitative discussion of cash and funding liquidity risk that includes some quantitative information supporting the discussion. The information should include a discussion about concentrations of funding sources, including the percentage of short term funding provided by the three largest creditors for outstanding unsecured credits.

III. Credit Risk

All financial intermediaries should provide quantitative information describing their exposures to credit risk in terms of the type of exposure, credit quality and maturity, using breakdowns or definitions that reflect the nature of the institution's exposure to credit risk. (See Chart 5, Panels A and B, for related results from the pilot study.)

Disclosure of:
(1) The amount of current credit exposure broken out by categories that reflect the nature of an institution's credit exposures. The exposure shown should be expressed in terms of both:

- replacement values after counterparty netting; and
- net exposure after counterparty netting, collateral and other loss mitigation arrangements.

The amount of exposure shown should include an assessment of the loan equivalent amount from guarantees, credit derivatives and other contingent arrangements granted.
(2) Current credit exposures disaggregated by credit rating (either internal or external) for categories of exposures that reflect the nature of an institution's credit exposures. The amounts shown should be replacement values after counterparty netting, with the effect of loss mitigation arrangements shown in the rating. When internal ratings are used, qualitative discussion of how the ratings relate to loss likelihoods and standard external rating classes should be provided.
(3) Current credit exposures disaggregated by maturity for categories of exposures that reflect the nature of an institution's credit exposures.

All financial intermediaries should provide basic performance information for their credit exposures.

Disclosure of:
Information on nonperforming loans, allowances, charge-offs and provisions, for categories of exposures that reflect the nature of an institution's credit exposures.

IV. Insurance

For non-life insurance, disclosure of reserve adequacy and loss development, pricing adequacy, and loss ratios would likely be practical in the near term. Before finalization, however, further collaborative work at the IAIS level to harmonize any disclosure requirements will be necessary due to differences in measurement methodologies and accounting standards between countries.

Disclosure of (for non-life insurance):
(1) Reserve adequacy: • development of paid losses and loss adjustment expense; • development of incurred losses and loss adjustment expense. (2) Pricing adequacy. (3) Loss ratios.

Disclosure issues for which further deliberation is required

Risk concentrations. Given the importance of risk concentrations and the role of correlation assumptions whether explicit or implicit in all measures of risk, further work on a practical means of expressing vulnerability to risk concentrations in market, credit, and insurance (including catastrophe) risks should be conducted by the public sector, with private sector involvement as appropriate. In this effort, the meaningfulness and potential effect on market functioning of greater granularity in risk profiles of market and credit risks, such as the use of economic regions, market sectors, industries or specific assets, should be examined. Issues here are whether risk concentrations can be expressed in a categorization of exposures at a practical level of granularity, or as stress tests are often used to assess risk concentrations, how the heterogeneity of stress testing practice would affect disclosure of such concentrations.[10] (See Charts 2 and 3 in Annex II for related results from the pilot study.) For insurance catastrophe risk, the IAIS should consider the meaningfulness and credibility of disclosures for various categories of catastrophe risk, including windstorm and earthquake.

Credit risk. Given the role of credit ratings in the recommended disclosure of credit risk, the public sector, in consultation with the private sector as appropriate, should consider (1) how loss mitigation arrangements could be consistently reflected in ratings of credit quality and the amount of credit exposure shown,[11] and (2) how performance measures relating to credit risk could be enhanced and made more timely by, for example, information about migration of current exposures across credit rating classes, or by information on the performance of the ratings of credit quality.[12]

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[10] / Stress tests are used by risk managers to explore vulnerability to risk concentrations (as well as for other purposes). A number of institutions in the pilot study, however, expressed concerns about comparability and interpretation in using stress tests for public disclosures, as well as with revealing proprietary information. For a discussion of risk concentration from a supervisory perspective see, Risk Concentrations Principles, The Joint Forum of the BCBS, IOSCO, and IAIS, Bank for International Settlements, December 1999. A survey of stress test practice is compiled in A Survey of Stress Tests and Current Practice at Major Financial Institutions, CGFS, Bank for International Settlements, April 2001.

[11] / In quantifying credit exposures, the effect of credit risk mitigation devices could be shown either as a reduction in the amount of exposure, or alternatively in terms of the rating of the transaction. The former could lead to the showing of a very small (net) exposure, while the latter would show a larger (gross) exposure whose rating is improved by the credit risk mitigant. When showing credit exposures by credit rating in the pilot study many firms expressed a preference for the latter approach because of the practice of rating transactions as opposed to the rating of counterparties.

[12] / This effort could consider the degree to which information about realized credit migrations might provide more timely performance information than traditional loss measures and also be independent of varying accounting conventions.

Development of risk assessment concepts and methods

Work in the following two areas regarding market and funding liquidity is likely to be best undertaken by the private sector because of the relevance of the issues to risk management, and the on-going efforts of risk managers in these areas. Moreover, the development of meaningful disclosures in these areas would require the expertise of risk managers. For these reasons, the public sector is not likely to wish to provide the lead in these areas; though it could contribute to such efforts through a dialogue with the private sector on market-wide issues relating to market and funding liquidity.

Market liquidity risk. While the one-day holding period used in most VaR disclosures provides a convenient benchmark and a useful means of conducting performance assessments, a one-day horizon does not adequately capture risk in the presence of market liquidity problems. (See Chart 4 in Annex II for relevant results from the pilot study.) For this reason, risk measures in addition to a one-day VaR would be useful. In light of ongoing work by risk managers on assessment of market liquidity risk, the *private* sector, perhaps through an industry group, could make an important contribution by developing risk assessments that take account of market liquidity and considering how such measures could be used in disclosure of market risk.[13]

Cash and funding liquidity risk. The *private* sector, perhaps through an industry group, could make an important contribution by engaging in a concentrated study of broad principles for the assessment of cash and funding liquidity risk as a first step towards quantitative disclosure of such risks. The effort might develop concepts for the measurement of both base-line sources and uses of liquidity as well as of contingent cash liquidity demands and contingent funding sources. While recognizing that important differences exist across industries and markets, and in particular that the time frames for liquidity management are different, the development of broad principles for quantitative disclosures in this area for all financial intermediaries would be a useful step forward.[14]

The last two areas concern the assessment of firm-wide exposures to market risk and to potential future credit exposures. As these issues require solutions to difficult conceptual problems as well as the development of complex firm-wide information systems, they should be conceived of as longer-term objectives of the *public* and *private* sectors in an open-ended collaboration.

The first objective would be to review or develop best practices in quantitative assessments of *firm-wide exposures to market risk*. For example, this effort could include development of concepts and methods for the treatment of interest rate sensitive

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[13] / For their internal risk management, a number of institutions are exploring the use of liquidity adjusted-VaR, in which the holding periods in the risk assessment are adjusted to account for market liquidity, in particular by the length of time required to unwind positions.

[14] / See Appendix A of the CRMPG (1999) report for a useful exposition, and also, Sound Practices for Managing Liquidity in Banking Organisations, Basel Committee on Banking Supervision, Bank for International Settlements, February 2000.

contingent liabilities such as life-insurance liabilities or demand deposits. The second objective would be to develop concepts for the measurement and disclosure of *institution-wide potential future credit exposure*. In both areas, while differences across financial sectors or even across firms, such as in the time-horizons of risk management, will certainly determine the details of risk assessment practice, a concerted endeavor might help develop principles or identify frameworks that would prove useful for a range of financial intermediaries.

Insurance risks

The pilot study proved to be extremely valuable in highlighting the particular areas relating to insurance risks that require further study. Although many insurance risks either are, or are perceived to be, different in nature from those facing other financial institutions, the Working Group believes that the principles of enhanced disclosure apply equally to insurance risks and that there is considerable value in pursuing these in a way which is appropriately sensitive to the different nature of insurance. The experience with the insurance section of the pilot study template showed, as expected a wide variety of differing disclosures and risk measures. While risk measures for non-life insurance are likely to be practical in the near term, as described above, other risk measures such as summary measures of risk for both life and non-life insurance, and other life insurance risk measures require considerable more cooperative work by the public and private sectors. The Working Group recommends that these unique insurance issues be referred to the IAIS. Consistent with this, in 1999 the IAIS created a Task Force on Enhanced Disclosure which is currently developing principles for disclosure in the insurance sector.

Leverage concepts

At this time, a meaningful summary measure of leverage would not be practical for most complex financial intermediaries. Traditional balance sheet leverage measures do not reveal enough about firm-wide risks relative to capital available to absorb those risks (see Chart 6 in Annex II for results from the pilot study). A risk-based leverage concept, such as required economic capital or risk-adjusted capital relative to actual capital that some firms are adopting is a promising step in this direction.[15] At this time, however, the Working Group believes that risk-based measures of leverage would require further development and experience with their use before they become informative for the disclosures of large complex institutions. The Working Group stops short of making recommendations regarding measures of leverage, but recognizes the importance of the efforts of the financial institutions which are experimenting with and developing more meaningful measures of leverage, and hopes that the firms continue with these efforts.

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[15] / Many firms are developing measures of required economic capital or risk adjusted capital for risk management and internal capital allocation within the firm; and such measures might be useful in disclosure as well. The CRMPG (1999) report provides a very useful discussion of the issues relating to measures of leverage.

Annex I

Illustrations of Recommended Disclosures

The following tables are provided as illustrations of the type of disclosures that the Working Group is recommending for financial intermediaries. This type of information, when material for a firm, should be disclosed in a way that in the firm's judgement most meaningfully expresses its exposures to risk.

Qualitative discussion

Discussion of the institution's exposures to financial risk and how they are managed. In addition, a description of the scope and nature of the firm's quantitative data about its risks, including descriptions in each of the areas below of those positions, exposures, or activities that are not reflected in the respective risk measures or quantitative data.

Quantitative information

I. Market Risk

I.A. Trading activity or actively managed marked-to-market exposures

The disclosures in this section should apply to all exposures to market risks that are *actively managed* on a marked-to-market and self-contained basis. Usually, this section would apply to exposures that are the most actively managed such as trading activity.

Value-at-Risk by Category

Type of risk or activity:*	High	Median	Low	Period-end
Currency	--	--	--	--
Equity	--	--	--	--
Fixed Income	--	--	--	--
Commodity	--	--	--	--
Diversification effect	--	--	--	--
Aggregate VaR	--	--	--	--

Reported in terms of the one-day VaR and two-week VaR.[16]

* Either the categories in this table or other categories of risk or business lines that better describe the institution's risk profile.

Performance

For P/L corresponding to the aggregate VaR in the previous table: Information about risk and return, including comparison of risk estimates with actual outcomes, such as cumulative P/L, and histogram of daily P/L divided by daily VaR. Discussion to help in the comparison of the P/L and risk measures, including a description of differences between the basis of the P/L and the basis of the VaR estimates.

[16] / In the pilot study, the VaR estimates were standardised at the 95th percentile one-day VaR, and 99th percentile two-week VaR.

I.B. Institution-wide exposures to market risk

The information in this section would be provided by financial intermediaries that use a firm-wide assessment of market risk in their internal risk management and have confidence in the risk measure. If the disclosure of actively managed exposures in the previous section (I.A) do not cover the entire institution or all of its material market risks, then information about the remaining institution-wide exposures to market risk would be provided here. Of course, if the disclosure in Section I.A covers the entire institution or all its material market risks, then Section I.B would be omitted.

The measure of risk would cover exposures across the entire institution and include all relevant exposures, compiled on a net basis across assets, liabilities and off-balance sheet exposures (but excluding those exposures that were covered in Section I.A).

Measure of Risk by Risk Category

Type of risk or activity:*	High	Median	Low	Period-end
Currency risk	--	--	--	--
Equity market risk	--	--	--	--
Interest rate risk	--	--	--	--
Diversification effect**	--	--	--	--
Aggregate measure of risk**	--	--	--	--

* Either risk categories as in this table or other categories that better describe the institution's risk profile.
** If feasible and meaningful in the risk measurement system used by the firm

II. Funding liquidity risk

Qualitative Discussion

Substantive qualitative discussion of funding liquidity risk that includes at least some quantitative information supporting the discussion.

Percentage of short term credit provided by the largest creditors

	Largest	Second Largest	Third Largest
As a percentage of the total outstanding short term unsecured credit:	--	--	--

III. Credit risk

Amount of Credit Exposures

Type of credit or activity:	Repl. value*	Net**
Credit instruments		
Business or credit category 1	--	--
Business or credit category 2	--	--
.....	--	--
.....	--	--
Sub total for credit instruments	--	--
Counterparty exposures		
Repurchase agreements and security loans	--	--
Counterparty exposures in derivatives contracts	--	--
Reinsurance counterparty risk	--	--
Sub total for counterparty credit exposures	--	--
Total	--	--
Addendum: Expected value of exposures from commitments to extend credit	--	--

Value at period end of current credit exposure.

* Replacement value after application of counterparty netting agreements.

** Net replacement value after the application of counterparty netting agreements and all loss mitigation arrangements (e.g. collateral, guarantees, credit derivatives).

Amount of Credit Exposure by Credit Rating

Credit quality rating:*	Credit instruments	Counterparty credit exposures
AA- or higher	--	--
A+ to BBB-	--	--
BB (+ to -)	--	--
B (+ to -)	--	--
Lower than B-	--	--
Unrated	--	--

Replacement value of current credit exposure at period-end, after application of counterparty netting agreements.

* For either internal or external ratings. If internal ratings, description of how they relate to standard external ratings categories.

Credit Exposure by Remaining Maturity

Maturity category:	Credit instruments	Counterparty credit exposures	
		By remaining maturity of the contract	By maturity of termination option
Six months or less	--	--	--
Over six months to one year	--	--	--
Over one year to five years	--	--	--
Over five years	--	--	--

Replacement value of current credit exposure at period end, after application of counterparty netting agreements.

Credit Losses During the Reporting Period*

Type of credit or activity:	Loans	Securities	Counter-party Exps.	Reinsurance	Total
Type of business or credit	--	--	--	--	--
Type of business or credit	--	--	--		--
.....	--	--	--		--
.....	--	--	--	--	--
Memorandum items:					
Nonperforming or in default (balance at "as of date")	--	--	--	--	--
Allowance for loan losses (balance at "as of date")	--	--	--	--	--
Charge-offs/write-downs net of recoveries**	--	--	--	--	--
Specific loss provisions**	--	--	--	--	--
General loss provisions**	--	--	--	--	--

* For securities marked-to-market, report only losses arising from payment defaults (e.g. the amount would not include mark-to-market losses associated with changes in credit spreads).

** Amount declared during the reporting period.

Annex II

Results from the Pilot Study

In the pilot study, firms provided data on a confidential basis using a common template for activities or risks that were material from the second quarter of 2000. Some firms provided data on a less than fully consolidated basis. In these cases, the ideal reporting entity represented businesses or activities that were managed as an integrated entity for risk management purposes; in some cases the reporting entity was determined by the nature of an institution's internal information systems and the burden of providing consolidated data, or by a concern about the sensitivity of firm-wide data. While forty-four firms provided data in the study, only some firms provided data for all sections of the template.

The charts and discussion in this annex summarize the findings in the pilot study that pertain to the recommendations in the text. In some charts, the type of institution providing each data point is indicated along the edge of the chart. To respect the anonymity of the institutions whose data are shown in the charts, the ordering of institutions varies from chart to chart.

Description of Institutions Participating in the Pilot Study

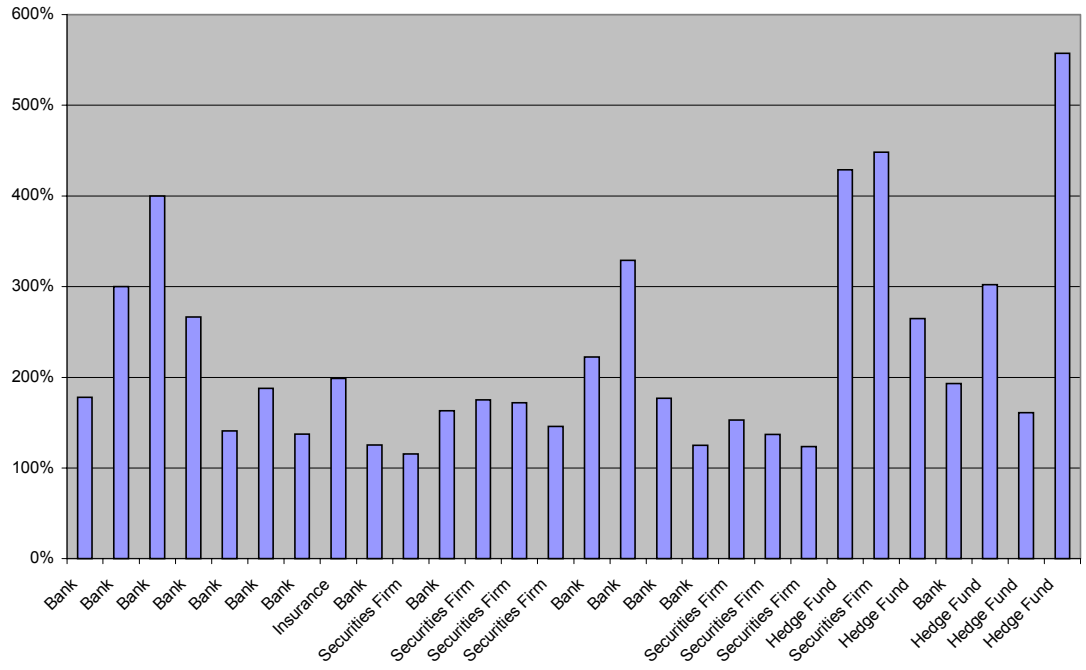
Industry	Number of institutions
Banks	16
Hedge funds	5
Insurance companies	11
Mutual funds/unit trusts	4
Securities firms	8
Number of countries represented: 9	

Intraperiod information

Chart 1 shows the difference between the high and low amounts of value-at-risk over the reporting period (for trading or marked-to-market activity). The measure on the vertical axis is the high value as a percentage of the low value for each firm in the study that provided VaR data. The firms in the chart are ordered by the size of their median VaR (scaled to capital). The chart shows that there is substantial variation of measured risk over the reporting interval, and the degree of variation differs across firms. While this chart uses the aggregate VaR for trading or marked-to-market activities, similar results were found for the VaR measures broken down by type of risk.

Chart 1

High Relative to Low Values of Intraperiod Value-at-Risk*



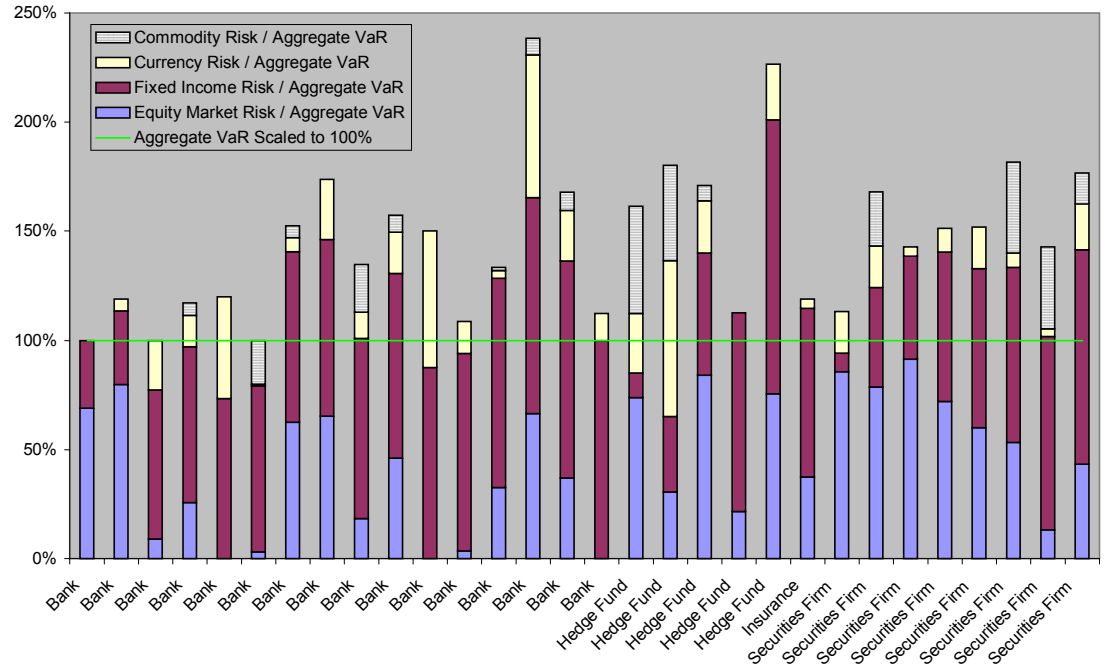
*95th percentile one-day value-at-risk for trading or marked-to-market activities. Ordered by median value-at-risk.

Risk concentrations and correlation assumptions

Chart 2 displays the relative composition of market risk as a percentage of each firm's aggregate market risk (in trading or marked-to-market activity). The chart shows the degree to which firms' estimates of their exposure to market risk benefits from diversification effects across major asset classes.[17] Chart 3 on the next page shows the risk in the largest granular exposures relative to aggregate risk for fixed income activities.[18] Direct comparisons across firms in this chart would not be meaningful because of differences in how firms' defined their large positions. This lack of comparability suggests that further work on how to portray exposure to risk concentrations and correlation assumptions in disclosures would be useful.

Chart 2

Composition of Market Risk as a Percentage of Aggregate Value-at-Risk*

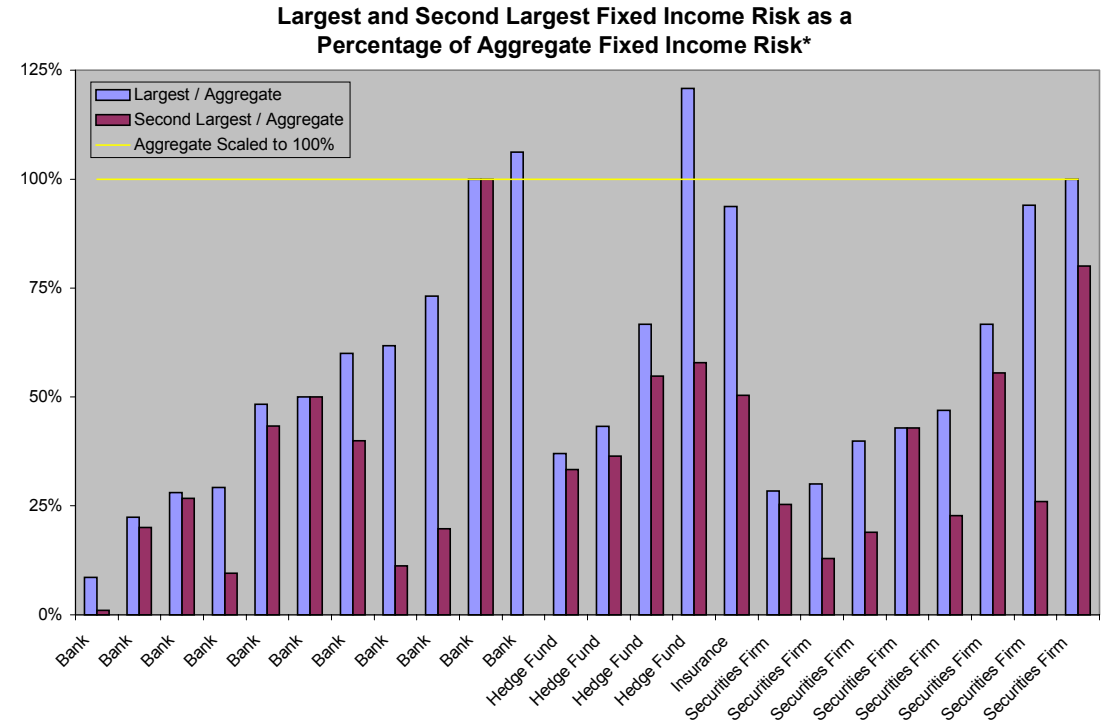


*99th percentile two-week value-at-risk for trading or marked-to-market activities (median values over the reporting period). Ordered by institution type and fixed income risk scaled to aggregate value-at-risk.

[17] / The sum across categories is greater than one hundred percent because of diversification effects.

[18] / The pilot study instructions for this chart defined a large position as, "the measured risk of each of the two largest positions, or risk factors, that are meaningful in the context of the risk management model used by the firm." Depending on the nature of the trading portfolio, the large exposure could be to a country, currency, fixed income market, industry sector, or even a particular leg of a trading position.

Chart 3



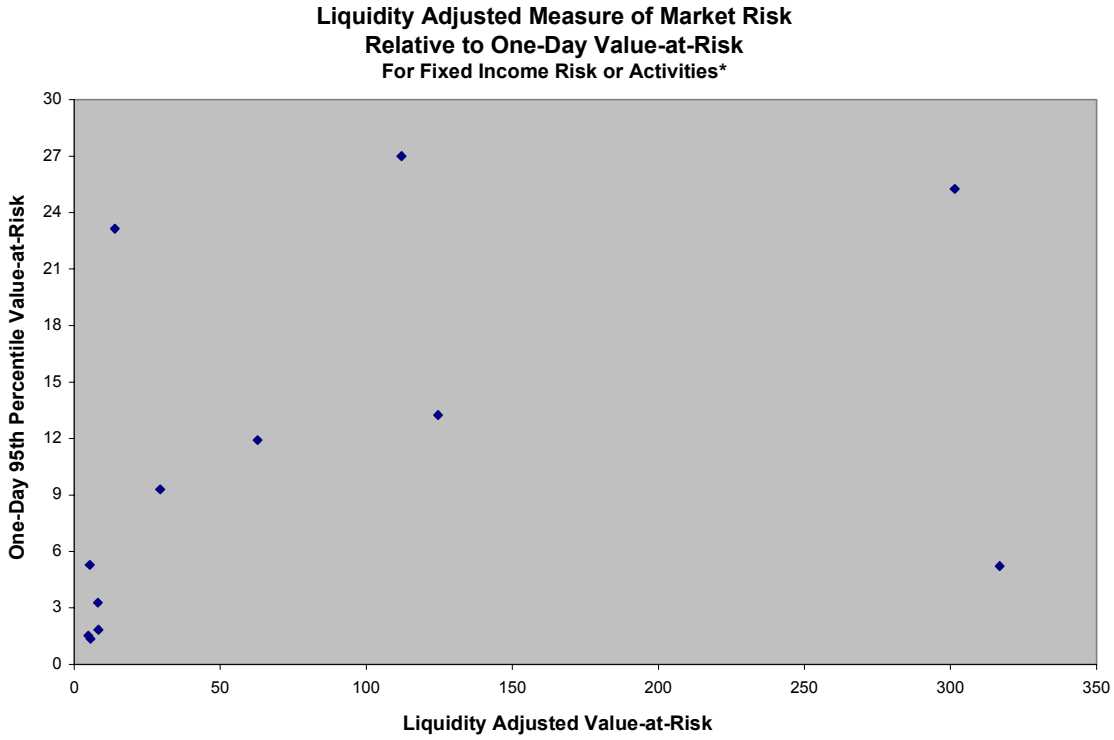
*Ordered by institution type and largest fixed income risk as a percentage of aggregate.

Corrected chart, April 25th, 2001.

Market liquidity risk

Chart 4 displays each firm's one-day VaR on the vertical axis relative to its liquidity-adjusted VaR on the horizontal axis (for trading or marked-to-market activity). The liquidity-adjusted VaR is an estimate of market risk that takes account of the liquidity of the positions and markets to which the firm has exposure. While a one-day VaR estimates exposure to market risk over a one-day holding period, implicitly assuming that all positions can be unwound in one day, a liquidity-adjusted VaR estimates risk using holding periods determined by the length of time that would be required to unwind positions.[19] In the pilot study, the liquidity-adjusted measure produces a much higher estimate of risk, and is about five times larger on average.

Chart 4



*Amounts scaled to $1000 of capital or net asset value of the portfolio represented in the risk measure. Median values.

The chart raises the question of how reliable a one-day VaR by itself is as an indicator of market risk, as the ordering of firms by one-day VaR is quite different from the ordering using the liquidity-adjusted measure of market risk. Even though part of the difference between the two risk assessments seen in the chart is undoubtedly due to differences in assumptions and estimation methods in the firms' liquidity-adjusted VaRs, this risk estimate is still consistently larger than the one-day VaR. These observations suggest that development of risk measures that could complement one-day VaR would be

[19] / For further discussion see Appendix A of the CRMPG (1999) report.

useful.[20] However, as a liquidity-adjusted VaR is still somewhat of an experimental risk assessment tool, further development of this concept or other alternatives would seem to be sensible before determining whether they would be useful in disclosures of market risk.

In the pilot study, data were also gathered on two-week VaR.[21] A comparison of two-week VaR with liquidity-adjusted VaR provided results similar to the chart above, as the two measures also produced different orderings of firms by relative riskiness. In contrast, however, the liquidity-adjusted VaR was usually smaller than the two-week VaR – but not always. An interesting property was that for most firms the liquidity-adjusted VaR was smaller than the two-week VaR in the case of equity risk, but for fewer firms in the case of fixed-income risk.

[20] / One-day VaR is probably the most commonly used measure of market risk in trading activity. In addition to its usefulness for activities with a high degree of turnover of positions or where positions are adjusted quickly in response to market conditions, it provides high frequency data (daily) that allows tests of performance with higher statistical power than would VaR with longer holding periods.

[21] / A two-week VaR is value-at-risk estimated using a two-week holding period.

Credit quality ratings

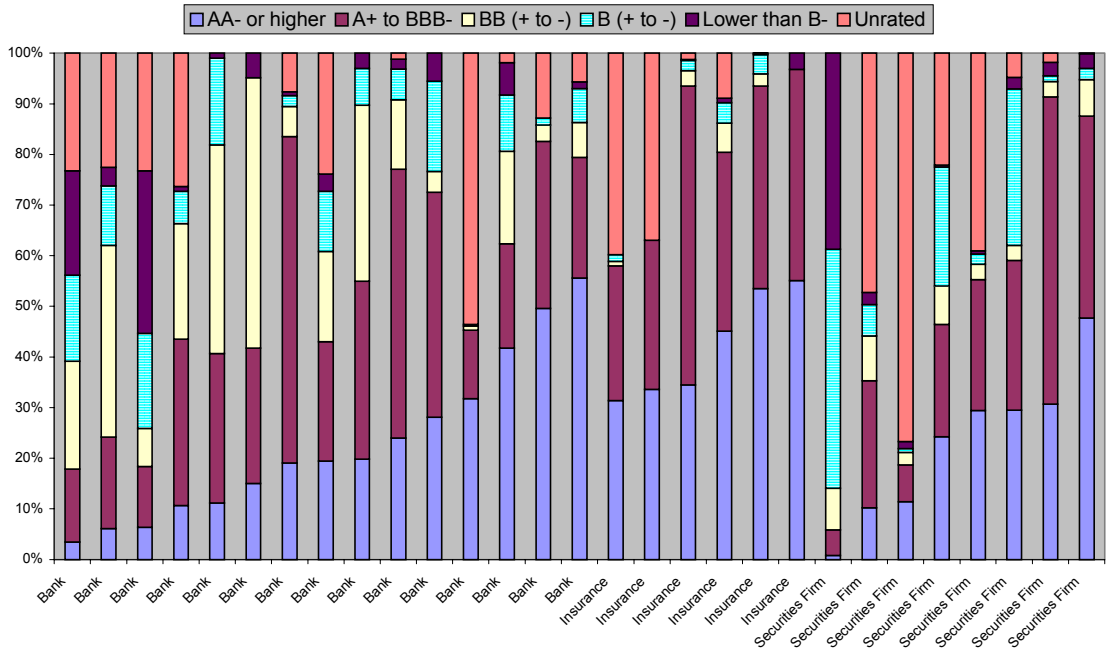
The following two charts show the composition of firms' credit exposures by credit rating, for credit instruments in the Panel A and counterparty credit exposures in Panel B. The two charts show that the credit ratings of credit instruments and counterparty exposures are different, with counterparty exposures having somewhat higher credit quality than credit instruments. This observation of differences in credit risk between different classes of exposures suggests that some disaggregation of credit ratings breakdowns by type of exposure or credit would seem to be useful.[22] Another interesting feature of both charts is the difference in the composition of credit quality both within and across industry groups. The pilot study also showed the importance of qualitative information in comparing credit exposures by rating. A number of participants emphasized that this was essential to the correct interpretation of the data presented here.

[22] / The disaggregation by type of exposure (e.g. small business/large commercial loans, or loans/derivatives) that would best characterize the nature of an institution's credit exposures are probably best left for each institution to determine.

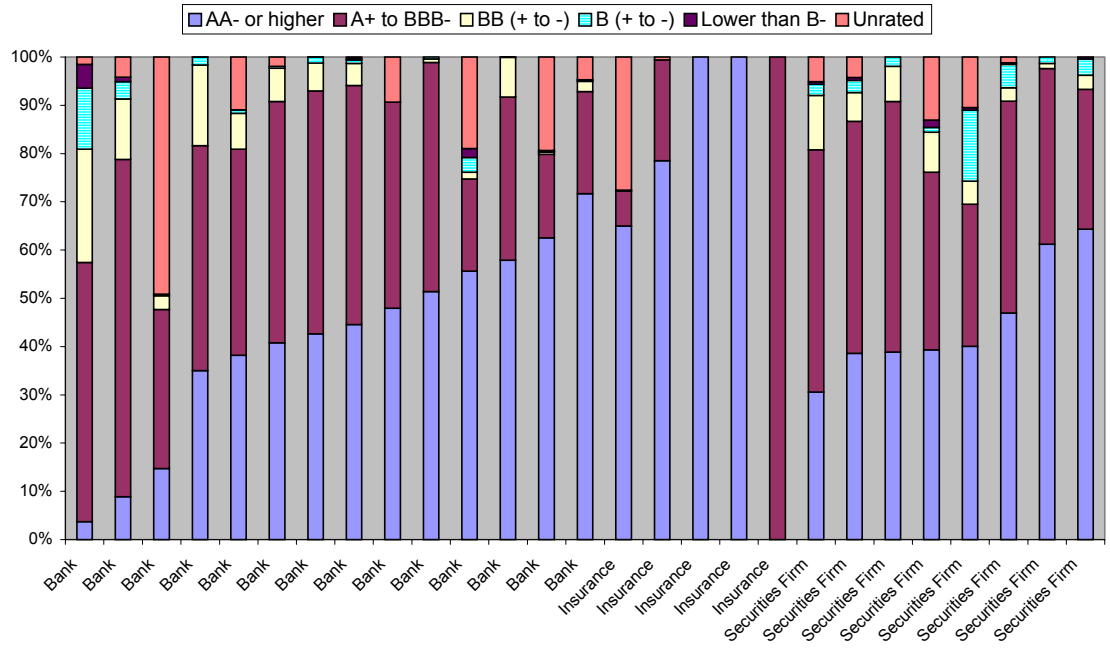
Chart 5

Credit Exposures by Credit Rating*

Panel A: Credit Instruments



Panel B: Counterparty Credit Exposures

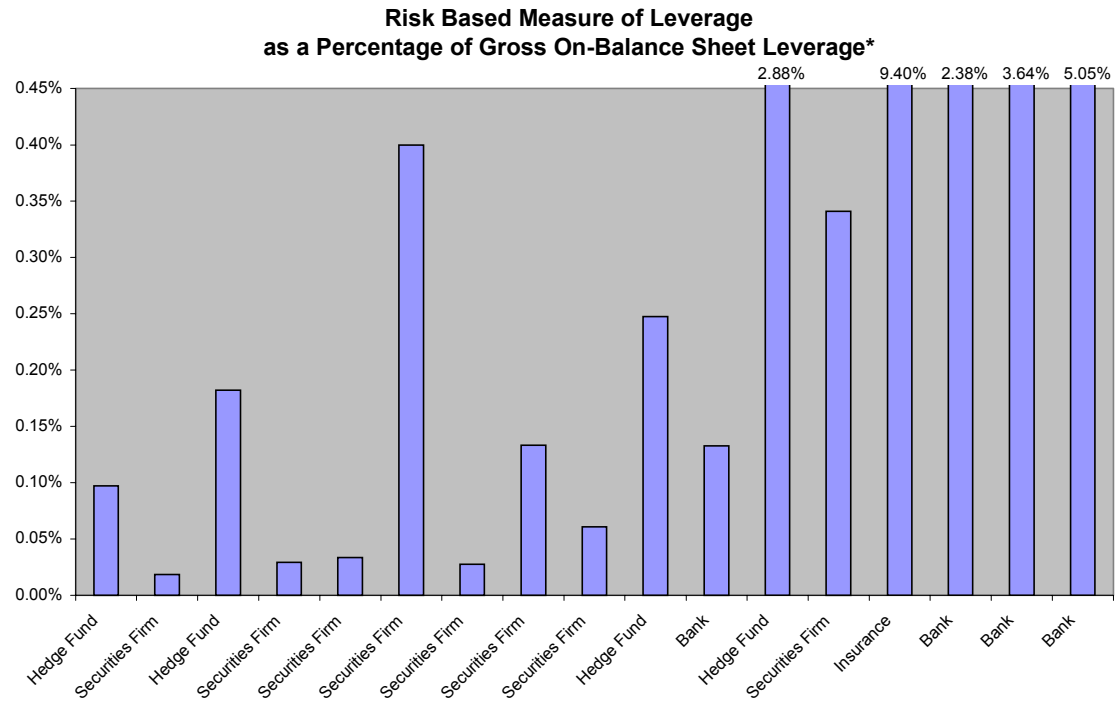


* Replacement values after counterparty netting, for either internal or external ratings that map into the ratings in the chart. Firms are ordered by share of credit instruments rated AA- or higher in Panel A, and by counterparty exposures rated AA- or higher in Panel B.

Leverage

Chart 6 shows the relationship between two measures of leverage, a risk based measure of leverage and the traditional balance sheet leverage.[23] In the chart, the risk based measure is displayed as a percentage of the balance sheet leverage measure, with the firms ordered in ascending size of their risk based leverage. The widely varying ratios of the two leverage measures in the chart suggests that the firms' own assessments of their risk based leverage bears little relationship to the traditional balance sheet measure of leverage. While differences among the firms in how they measured their risk based leverage prevents drawing clear conclusions from this chart, the results support the view that the traditional balance sheet measure of leverage does not provide much insight to a firm's capacity to bear risk.

Chart 6



*Ordered by size of risk based measure of leverage.

[23] / In the pilot study, the risk-based measure of leverage was defined as a measure of institution-wide potential losses relative to the capacity to bear those losses, as measured by the ratio of estimated losses to book value of capital. The balance sheet measure of leverage was defined as total on-balance sheet assets divided by book value of capital.

Annex III

Participants in the Pilot Study and the Multidisciplinary Working Group on Enhanced Disclosure

1. Private Sector Institutions that Provided Data in the Pilot Study

Banks

Abbey National Group
Banco Nacional de Mexico SA
Banco Santander Mexicano SA
Bank of Tokyo-Mitsubishi
Barclays
BNP
Chase Manhattan Corporation
CIBC
Citibank
Credit Lyonnais
Deutsche Bank
Industrial Bank of Japan
JP Morgan
Sanwa Bank
Skandinaviska Enskilda Banken (SEB)
Sumitomo Bank

Hedge Funds

Caxton Corporation
JWM Partners
Moore Capital Management
Soros Fund Management
Tudor Investment Corporation

Insurance Companies

Aetna
American General Corp.
AMP
AXA
CGU
Clarica Life
Liberty Mutual
Prudential PLC (UK)
Suncorp Metway
Tokio Marine and Fire

Mutual Funds

Capital Research
Fidelity Investments
Putnam Investments
Vanguard Group

Securities Firms

Bear Stearns
Daiwa Securities SB Capital Markets
Goldman Sachs
Lehman Brothers
Merrill Lynch
Morgan Stanley
Nomura Securities
Salomon Smith Barney

2. Public Authorities that Conducted the Pilot Study

Australian Prudential Regulation Authority
Banco de Mexico
Bank for International Settlements
Bank of Japan
Commission Bancaire (France)
Commission de Controle des Assurance (France)
Commission des Operations De Bourse (France)
Deutsche Bundesbank
Federal Banking Supervisory Office (Germany)
Federal Reserve Bank of New York (United States)
Financial Services Authority (United Kingdom)
Finansinspektionen (Sweden)
Iowa State Division of Insurance (United States)
Office of the Superintendent of Financial Institutions (Canada)
Office of the Comptroller of the Currency (United States)
Securities and Exchange Commission (United States)
State of New York Insurance Department (United States)

3. Multidisciplinary Working Group on Enhanced Disclosure

For the Basel Committee on Banking Supervision:
Jan Brockmeijer, DeNederlandsche Bank
Thomas Rees, Office of the Comptroller of the Currency (United States)
For the Committee on the Global Financial System of the G-10 Central Banks:
Javier Duclaud, Banco de Mexico
Satoshi Kawazoe, Bank of Japan
For the International Association of Insurance Supervisors:
Mats Stenhammar, Finansinspektionen (Sweden)
Terri Vaughan, Iowa State Division of Insurance (United States)
For the International Organisation of Securities Commissions:
Francois Champarnaud, Commission des Operations De Bourse (France)
Michael Macchiaroli, Securities and Exchange Commission (United States)
Paul Wright, Financial Services Authority (United Kingdom)
Chair:
Peter Fisher, Federal Reserve Bank of New York (United States)
Secretariat:
Allen Frankel, Bank for International Settlements
John Kambhu, Federal Reserve Bank of New York (United States)

Annex IV

Glossary and Definitions

95th Percentile loss The 95th percentile of losses in a distribution of possible losses, ranked from smallest to largest. Losses in excess of this amount, are expected to occur 5% of the time. (See also, value-at-risk.)

Counterparty netting The netting of claims between counterparties to reduce the amount owed to a single net amount between two counterparties (bilateral counterparty netting), or a single net amount between each counterparty and a clearing house (multilateral counterparty netting)

Diversification effect With diversification, risk is potentially reduced by distributing assets among a variety of asset classes whose price changes are not highly correlated, such as stocks, fixed income instruments, and physical commodities, as well as by diversifying within these categories across market or industry sectors and across international boundaries or currencies.

Holding period The period of time an investment is held, or the time interval over which exposure to price risk is measured.

Leverage The amplification of return (positive or negative) that occurs when an investor takes on exposure that is not completely funded by the investor's own equity. In a leveraged position, a small change in the yield of assets has a multiplied effect on the rate of return (or loss) on equity.

Loss mitigation arrangements A device used to reduce the amount of loss in the event of default, such as collateral, credit derivatives, or a guarantee from a third party. The level of protection afforded by such loss mitigants can vary widely.

Median The middle observation in an ordered distribution. After the mean, the most common measure of central tendency .

P/L (P&L or profit and loss) A statement of the profitability of a portfolio or business unit.

Performance See P/L.

Replacement value The value of an asset, liability, or position assessed at the cost at which it could be replaced at current market prices or fair values.

Repurchase agreement (repo) A collateralized financing arrangement whereby a holder of securities sells the securities to a lender and agrees to repurchase them at an agreed future date at an agreed price. This arrangement leaves the lender with an extremely low credit risk, and repos are commonly used in trading and investment activities because they can reduce credit exposures in financing such activity to very low levels compared to unsecured funding.

Stress test A simulation of the potential loss to a portfolio resulting from a hypothetical extreme price change, market event, or credit event.

Unsecured credit Credit instrument against which no collateral is posted by the borrower.

Value-at-risk (VaR) A statistical measure of potential losses over a given holding period. The measure consists of a benchmark loss amount and accompanying probability estimate. It is a confidence interval in which losses in excess of the benchmark loss amount are estimated to occur with a specified likelihood. (For instance, for a 99th percentile VaR, losses in excess of the VaR amount would be expected to occur 1% of the time.). A useful feature of VaRs is that its statistical basis allows the aggregation of risk across risk factors to provide estimates of overall risk of a portfolio or institution.