11 March 2002

The FSF Recommendations and Concerns Raised by Highly Leveraged Institutions (HLIs): An Assessment

I. Introduction and background

1. In March 2000, the Financial Stability Forum (FSF) endorsed recommendations to address concerns raised by highly leveraged institutions (HLIs) following the Asian Crisis and the Long Term Capital Management debacle.[1] These included strengthened risk management practices by HLI counterparties and HLIs, enhanced regulatory oversight of HLI credit providers, enhanced public disclosure by HLIs and counterparties, improvements to market infrastructure, guidelines on good practices for foreign exchange trading, and enhanced market surveillance by national authorities. The Report did not recommend direct regulation of currently unregulated HLIs but indicated that this would be reconsidered if, upon review in March 2002, the implementation of the report's recommendations had not proven effective in addressing the concerns identified.

2. In March 2001, the FSF took stock of the progress towards implementation of the recommendations, drawing on a note from the Chairman of the HLI Working Group.[2] And in September 2001, it set in train work on the present assessment, which has been prepared by the FSF Secretariat, drawing on input from FSF members, consultations with external experts and market participants, and previous reports.[3]

3. The note provides a general overview of recent developments in the industry in order to provide a context for consideration of the progress made in addressing earlier concerns. It also highlights industry changes that have given rise to some fresh concern, though these do not pose threats to financial stability per se. The note concludes with issues for the FSF's consideration.

II. Recent developments in the hedge fund/HLI industry

4. As noted in previous reports, it is difficult to trace precisely the evolution and performance of the hedge fund industry given that it is difficult to define hedge funds, they do not face public reporting requirements, and the global nature of their business. That said, the following composite picture can be sketched, drawing on available information:[4]

- The hedge fund/HLI industry is estimated conservatively to have grown to around US$400-500 billion of capital under management by the third quarter of 2001 as

[1] Hereafter, the 2000 Report/Recommendations (www.fsforum.org)

[2] Hereafter, the 2001 Report (www.fsforum.org)

[3] As part of the background work in preparing this assessment, FSF members provided information on developments in the hedge fund/HLI industry within their jurisdictions, remaining concerns on the progress achieved in implementing the earlier recommendations, and new concerns about HLIs in light of developments within the industry and/or market circumstance. In addition, a meeting with a range of market participants (hedge fund managers, prime dealers, other credit providers, and an external consultant) and representatives of the FSF was held in mid-February 2002 for an informal exchange of views on recent developments in the industry.

[4] See www.tassresearch.com, www.vanhedge.com, www.tremont.com, and www.marhedge.com.

compared to US$175-300 billion at the end of 1998. The number of active funds has increased and is estimated to be between 4000-5000, but could be higher.[5]

- Widely cited data sources estimate that a record US$22.3 billion of net capital flowed into the industry in the first 3 quarters of 2001, as compared to a net inflow of US$8 billion for the whole of 2000.
- While *Long/Short Equity* funds reportedly accounted for almost half of estimated total industry assets, two-thirds of recent inflows have flowed into *Event Driven* and *Convertible Arbitrage* funds. Convertible arbitrage funds are estimated to have bought about 60 percent of the convertible bonds issued last year.[6]
- Hedge funds have reportedly recorded, on average, modest positive returns on capital under management during 2001, outperforming most major market indices. Largest gains were posted by *Global Macro* and *Convertible Arbitrage* funds

5. Several of the trends identified in the 2001 Report have continued or become more pronounced:

- Alongside the accelerating inflows into the industry, the number of funds has further increased. New entrants are generally of small average size at inception.
- The number of large hedge funds has declined, reflecting diminishing returns from size, diminished liquidity in markets and more discipline exercised by managers in containing the size of funds. The very large macro funds so prominent in the 1990s have either scaled back or ceased operations, though there are a number of "mid-sized" funds.
- Institutional investors, i.e., pension funds, insurance companies, endowments and foundations, reportedly account for a growing share of the recent surge in inflows to hedge funds and fund of funds.[7]
- The number of funds of hedge funds ('funds of funds") has continued to grow at a rapid pace.[8] Funds-of funds are offered by "brand name" financial institutions to market hedge fund-type products, sometimes with capital guarantees, to institutional and, increasingly, retail investors.
- There has been an increase in hedge fund assets under management in Europe and to a lesser extent Asia. The bulk of funds continue to be managed out of the United States and United Kingdom, with the funds still largely located in offshore centres; however,

[5] *Hedge Funds, Leverage, and Lessons of Long-term Capital Management: the Report of the President's Working Group Report* (April 1999) estimated the hedge fund universe as at mid-1998 at 2500 to 3500 funds.

[6] See Financial Times, 08/01/02. Total equity-linked bond issuance is reported to have been $150 billion in 2001

[7] It has been estimated that institutional investors accounted for about 25 percent of hedge fund capital in 2000 as compared to only 5 percent in 1993 (*Wall Street Journal*, 03/01/01). While this share is likely to have increased, the majority of assets under management is still said to be from high net worth individuals.

[8] Generally, a fund of funds is a diversified portfolio of investments in individual hedge funds and other investment vehicles. This blending of different strategies and asset classes aims, through apparent low correlations among the various components, to deliver a more consistent return than any of the individual funds. According to a study by UBS Warburg, *Searching For Alpha Continues*, September 2001, there were around 450 funds of funds operating at the end of 2000, which were estimated to cover around 20-25 percent of the hedge fund universe. In the United States, "funds of hedge funds" generally means a registered investment company that invests primarily in hedge funds. Investors receive all of the protection afforded an investor in any registered investment company, including enhanced disclosure and prudential requirements designed to prevent self-dealing and favouring affiliates. In some other jurisdictions the term fund of hedge funds may mean unregistered funds with various features, such as principal guarantees.

other centres (e.g. Paris) are apparently proving to be attractive locations for funds specialised in certain investments.

- To facilitate market development and product innovation, some financial centres have either established, or are in the process of establishing, guidelines for the authorisation of local hedge funds in their jurisdictions.[9]
- Global macro funds have been more active in 2001 than in the previous 2 years, although the size of these funds (and the leveraged employed) has not reached the proportions of the large macro funds in existence pre-1998.

III. Progress in addressing earlier concerns

6. The 2000 Report focussed on three main concerns:
   - The systemic risks arising from the accumulation of high levels of leverage in financial markets;
   - The potential market and economic impact of a sudden and disorderly collapse of an unregulated HLI; and
   - The potential market dynamic issues relating to HLI activities in small and medium-sized open economies, including the possibility that large and concentrated positions could amplify market pressures and that aggressive trading practices could compromise market integrity.

7. To address these concerns, a package of responses considered to be consistent, complementary and commensurate to the problems identified was recommended. The following highlights key developments in the main areas covered by the recommendations.

Counterparty risk management and regulatory oversight

8. Improved counterparty risk management by HLI credit providers was highlighted in the 2000 Report as critical to addressing concerns about the accumulation of excessive leverage in the financial system. Enhanced regulatory and supervisory oversight of credit providers was emphasised as the means to help ensure that sound practices and improvements in counterparty risk management were maintained over time.

9. Following the development of guidance on sound practices towards HLIs -- now incorporated in supervisory/regulatory approaches in many major financial centres -- the Basel Committee and IOSCO reviewed progress by firms in implementing the guidance in March 2001.[10] The BCBS/IOSCO survey noted advances in risk management capacity and practices, and in flows of information from HLIs to credit providers, but found that competitive pressures continued to affect firms' ability to insist on a full range of measures to mitigate risk. It stressed the importance of preventing complacency from setting in on

[9] In response to interest expressed by the financial industry, the Monetary Authority of Singapore issued guidelines in June 2001 that will allow hedge funds to be sold to the public subject to a minimum initial subscription of S$100,000 per investor, minimum manager expertise requirements and disclosure guidelines, and other requirements. In October 2001, the Hong Kong Securities and Futures Commission issued a consultative paper on offering hedge funds in Hong Kong, which discusses the issues involved and proposes a set of criteria for authorisation of such funds.

[10] See BCBS/IOSCO *Review of Issues Relating to Highly Leveraged Institutions*, 22 March 2001 www.bis.org, and www.iosco.org.

the part of either firms or supervisors. It noted that additional progress was needed to enhance exposure measurement methodologies, to improve the consistency with which information was provided to counterparties across the hedge fund industry, particularly the provision of quantitative information from large funds, and in undertaking regular and comprehensive stress testing.

10. While no new cross-industry review has since been undertaken, national supervisory and regulatory authorities have continued to monitor developments in counterparty risk management practices, including through periodic meetings with HLI credit providers. Supervisors report that banks and brokers are generally doing a better job of due diligence and ongoing monitoring of hedge fund counterparties. Firms are also continuing work to improve the measurement of potential future exposure. One focus of these efforts is to capture and aggregate exposures across the institution's various relationships with individual counterparties.

11. A number of developments have been noted in recent discussions of counterparty relationships. These include:

- Major firms attribute ongoing improvements in counterparty risk management practices to internal industry pressures as well as strengthened regulatory oversight. They especially highlight the disciplining role of enhanced reporting of risk profiles to senior management, and improvements in the quality of information flow from hedge funds, particularly larger funds, reflecting ongoing dialogue about information needs. Improvements in due diligence are said to have been supported by the wider use of internal rating frameworks designed for hedge funds.
- Larger hedge funds are dealing with a relatively smaller number of brokers/lenders than before. This reflects their growing preference for dealing with counterparties whose risk management capabilities are able to support their needs.[11] The number of such broker/lenders has shrunk as result of consolidation among large service providers and decisions by some dealers to get out of this type of business.
- Newly established funds also prefer a single 'one-stop' counterparty that can provide the full range of services they require. The high costs of putting in place the more demanding legal and communications infrastructure are also a limiting factor in the number of prime brokers that funds deal with.
- Leverage is generally regarded in the market as lower than pre-1998 levels, with some shift in leverage reported away from fixed income towards equities markets. An increase in risk appetite has been seen since mid-2000 among credit providers with more sophisticated risk management capacity and other infrastructure available to support increased risk taking.
- There is reported to have been some downward pressure on margin arrangements with hedge funds, although it is unclear how widespread this may be. There is some evidence that established funds can negotiate more favourable margin arrangements. Major brokers/lenders argue that margin reductions are a reasonable trade-off when enhanced hedge fund transparency, including good quantitative information flows

[11] For example, sophisticated hedge funds expect credit terms tailored to their specific trading strategies and underlying credit quality. They seek counterparties that can offer credit lines on a potential future rather than current exposure basis, so as to avoid renegotiation when markets move.

regular dialogue, and an established track record, result in a better appreciation of the underlying risks being taken. Some margin decline may also reflect efforts by smaller prime brokers and credit providers to break into the industry.

- Both hedge funds and counterparties point to the lack of significant HLI failures or market disruptions despite the number of significant stresses within the system over the past years (bursting of tech bubble, 11 September, the collapse of Enron, Argentina's default etc) as testimony to the effectiveness of the improvements they have made in risk management practices, including bilateral information flows.

Hedge fund risk management practices

12. The 2000 Report emphasised the importance of implementation throughout the industry of the set of sound practices developed by a group of large hedge funds -- aimed at strengthening their own risk management, internal controls, disclosure/transparency, and documentation.[12]

13. Both market participants and industry observers note an increase in the institutionalisation and professionalism of hedge funds. There are some indications that the industry has made progress in improving internal risk management practices -- developing and monitoring internal risk systems, conducting various types of VaR analysis, stress testing, evaluating short-term credit positions, implementing their own internal capital charges -- and are employing more conservative strategies. Major hedge funds consider that the overall level of risk within the industry has been reduced since 1998.

14. Nevertheless, there are concerns that memories of the tumultuous events of 1997-98 could recede. Some well-established fund managers observe that the quality of fund managers able to attract capital is declining as inflows continue to increase, and note that insufficient portfolio diversification, excessive leverage and a failure to assess risks could pose challenges for some funds in the future.

15. The build-up of hedge fund positions and leverage in some strategies, such as convertible bond arbitrage, for which other investors appear to have little appetite, has raised concerns about valuations and the possibility that a large unwinding could trigger significant fund losses. While perhaps not acute at present, concerns have also been expressed about the risk management challenges associated with capital guaranteed products (discussed in more detail below).

Hedge fund disclosures

16. The disclosures that hedge funds make to investors are said to have improved. Hedge funds indicate that they are willing to provide monthly statements on general asset allocation, fund size, performance details and stress testing. The increased interest of institutional investors and their demand for more disclosure has contributed to these improvements.[13] However, data provided to investors are still limited in scope and, in the areas of stress testing and scenario analysis, tend to be qualitative rather than quantitative. While some

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[12] *Sound Practices for Hedge Fund Managers*, February 2000. Caxton Corporation, Tudor Investment, Soros Fund Management, Kingdom Capital and Moore Capital contributed to this report.

[13] Institutional investors usually have specific guidelines or rules about the type of investments in which they can invest and the levels of risk that are acceptable, which requires regular access to relevant information.

investors complain about this, it is unclear whether their concerns are sufficient to deter investment.[14]

17. Institutional investor interest in the hedge fund industry has prompted private sector-led initiatives to enhance hedge fund disclosure and transparency practices. The International Association of Financial Engineers' (IAFE) Investor Risk Committee (IRC), made up of institutional investors and hedge funds, recommended in July 2001 a set of disclosures that it would be desirable for managers to make to investors.[15] The IRC has undertaken to define model disclosure templates for different types or size of hedge funds, and aim that these would be available by the end of 2002. It is unclear how widely such disclosures practices would be adopted across the industry.

18. There have also been efforts by third parties such as credit rating agencies, accounting and consulting firms, and prime brokers, to mediate between counterparty banks and investors, on the one hand, and hedge fund managers, on the other hand, to broker information on risk exposures without identifying proprietary trading strategies. Some rating agencies have developed criteria for evaluating the creditworthiness of hedge funds and some hedge funds have received ratings.[16] Other independent third parties have developed products slated to be available in early 2002 that, if widely used, could improve hedge funds' ability to provide timely risk profile information.[17] However, some have cautioned that increased use of ratings could reduce in the future counterparties' incentives to reach their own judgement of HLIs' risk profiles.

Public sector initiatives to enhance hedge fund disclosures

19. The 2000 Report endorsed a number of official efforts to enhance public disclosure by unregulated hedge funds as desirable to strengthen market discipline and to reduce the potential for systemic risk.

20. To date, there has been little visible progress with regard to enhanced mandatory public disclosure beyond that described in the 2001 Report. The US authorities have indicated that in light of the downsizing or closing of the majority of large, highly leveraged hedge funds and the progress seen in information flows between hedge funds and lender/broker counterparties, they are of the opinion that mandatory disclosure requirements are not warranted at this time. No other country has progressed mandatory public disclosure initiatives with regard to hedge funds.

21. Some progress has been made in carrying forward public sector-led voluntary disclosure initiatives. The recommendations of the Multidisciplinary Working Group on Enhanced Disclosure (MWGED), which aim at improved and more comparable risk-based public disclosure by all types of financial institutions, including hedge funds, were released in April 2001.[18] Five major hedge funds participated in the pilot tests carried out by the

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[14] See Capital Market Advisors Survey, January 2002.

[15] The IAFE's initiative has been endorsed by the Managed Funds Association; the IRC Report is available at www.mfainfo.org.

[16] For example, Fitch IBCA has released a report on how it evaluates the creditworthiness of hedge funds, and Standards and Poor's has announced that it is developing such criteria for rating securitisation of multimanager hedge funds, which it expects to publish at the end of 2002.

[17] A hedge fund transparency product of RiskMetrics and Tremont aims at providing timely risk management measures on hedge funds to investors.

[18] See press release at http://www.fsforum.org/Press/P20010426.html.

MWGED; however, it is not clear whether they (or regulated firms) have begun to implement its recommendations. The MWGED recommended that the sponsoring organisations encourage hedge funds to provide the recommended disclosures, when material, on a routine basis to their investors, creditors and counterparties. To the extent that these firms do not disclose this information, the MWGED recommended that the relevant supervisory and regulatory authorities consider requiring such disclosures to the extent appropriate and consistent with the applicable regime. The Joint Forum has recently proposed to assess progress in implementing the MWGED recommendations and to examine the need for further follow-up on disclosure of financial risks.

Infrastructure improvements, including documentation

22. A number of weaknesses in legal and documentation infrastructure were revealed by the 1997-1998 events. The 2000 Report especially encouraged progress in efforts to improve close-out netting regimes for financial contracts, including netting across different types of contracts and to improve collateral and valuation practices, and documentation harmonisation across different products and jurisdictions.

23. The Global Documentation Steering Committee (GDSC) has continued its work on the harmonisation of legal provisions across various master agreements, where appropriate, in order to reduce so-called documentation basis risk.[19] Progress continues to be made but is slow. A new version of the ISDA Master Agreement incorporating some of the changes recommended by the GDSC, is expected to be published in 2002. Other trade associations that sponsor master agreements have indicated a desire to follow suit. Efforts are also underway to achieve a more effective organisational structure for the various trade associations representing the financial services industry, which could facilitate greater cooperation going forward in drawing up and implementing documentation improvements, and in carrying out other shared goals.

24. Discussions with market participants suggest that documentation has become more robust over the past 18 months. Hedge fund counterparties generally apply standard ISDA documentation, with cross-references to other agreements as these forms of documentation are now relatively tried and tested. Risk-based covenants, such as increases in initial margin if the risk profile of a fund increases, are said to be in greater use. Some hedge funds are reported to be sceptical that the basis on which these covenants are measured is sufficient to judge whether a fund's intrinsic risk profile is increasing.

National surveillance of financial market activity and functioning

25. The 2000 Report underscored the importance of strengthened national surveillance to identify rising leverage and possible concerns relating to market dynamics, including excessive concentration of positions.

26. National authorities in major financial centres have stepped up their monitoring of leverage deployed in financial markets. Some FSF members and non-members have noted that these efforts are hampered by the lack of reliable sources of information for evaluating developments in the hedge fund industry and identifying any potential sources of systemic risk. The lack of data may also complicate efforts to assess the risk to market dynamics

[19] To date, the GDSC has developed model provisions on involuntary insolvent default, cross default, force majeure and adequate assurances, which have been recommended to major trade associations for adoption.

from large positions or position concentration, whether by hedge funds or other HLIs. It has been noted that better sharing of information among regulators, including offshore regulators, could strengthen the effectiveness of national surveillance.

27. Some FSF members and non-members have suggested that national authorities revisit the question of whether statistics should be developed to track banks' credit exposures to hedge funds (e.g., by extending the scope of BIS statistics), or whether firm or fund level position data should be aggregated to help the authorities assess threats to market stability. Other FSF members note that there is no consensus that aggregate position data, of necessity available at discrete intervals with a sizeable lag, would be helpful to authorities in their surveillance of national financial markets, although it is clear that the cost of assembling such data would be high. Market participants underscore the importance of qualitative and contextual information for understanding evolving risks and question the usefulness of dated aggregate data for assessing systemic risk.

28. Consistent with the 2000 Recommendations and with encouragement from a small group of central banks, a group of leading foreign exchange market participants developed and issued in February 2001 a set of model guidelines on good foreign exchange trading practices. The guidelines have been endorsed by the bodies responsible for foreign exchange market standards in the main financial centres.

29. Concerns continue to be expressed by some about ***short selling*** – whether by hedge funds or others. Although short selling is an equilibrating and efficiency-enhancing market practice, large scale short selling at times of market upheaval may possibly contribute to further destabilisation. There were anecdotal reports that hedge funds and other financial institutions, engaged in short selling of equities in the aftermath of 11 September, a period in which some insurance/re-insurance companies were large sellers into falling markets. These reports of short selling have not been verified; hedge funds indicate that selling by insurance companies enabled hedge funds with open short positions to close them out. More recently, there have been reports of heavy short selling by investors, including hedge funds, in the Japanese stock market, sometimes in violation of market regulations.

30. Some FSF members have recently introduced additional regulatory provisions to address concerns about short selling.[20] It is recognised that any form of position taking (long or short) that damages market integrity (such as squeezes or collusion) raises concerns. Others consider that markets would generally work better if there were greater liquidity, with more short selling and not less.[21] IOSCO is undertaking a project on short selling, focusing in particular on whether there should be greater transparency of short selling in securities markets and the basis on which it could be implemented.

[20] The German authorities included a provision in a draft bill of the 4th Financial Market Promotion Law enabling the Federal Supervisory Office to prohibit short sales of domestic enterprises listed on German stock exchanges for a maximum of ten days. The Japanese authorities recently put in place measures aimed at enhancing regulations against manipulative short selling, e.g., by strengthening restrictions on pricing.

[21] Some analysis suggests that a lack of the ability to short sell (e.g., where lock up periods following IPOs limited the amount of stock available to lend in order to finance short positions) contributed to the "dot com" bubble by hindering those investors with a negative view on the sector from selling short.

IV. Fresh concerns

31. In the course of preparing this assessment, some fresh concerns have been raised by some FSF members about HLIs, reflecting recent developments in the industry and changes in market circumstances.

The marketing of hedge funds to retail investors

32. While distinct from earlier concerns, a new aspect that several FSF members have highlighted is the marketing of hedge fund-related products to retail investors. Some banks, notably in Europe, are issuing certificates (bank bonds) in which the interest rate or the amount repayable depends on the value of a portfolio of hedge funds. Minimum amounts for investment are often no more than €5,000-10,000. In other instances, some firms are offering funds of hedge fund products packaged as investment-trust type investments and structured as closed-end offshore companies, with listings on stock exchanges.

33. While perhaps not having a direct implication for financial stability, the marketing of hedge fund type-products to smaller investors has raised questions from an investor protection perspective about the extent to which retail customers understand these products and the risks entailed, and/or believe that they are regulated by the relevant authorities. [22] The increase in retail demand for hedge-fund products, combined with the less burdensome regulatory scheme and more flexible fee structure, could provide an incentive for mutual fund operators to establish separate hedge funds.

34. Some FSF members have issued consumer alerts or identified this as an area to be addressed in upcoming legislative changes. However, others members have seen little or no evidence in their jurisdiction that HLIs have permitted a significant number of retail investors to invest. The US authorities have indicated that, in their view, HLIs are generally unlikely to accept investments from retail investors so as to avoid losing their private offering exemption under the US regulatory system.

35. A standing committee of IOSCO has recently undertaken a survey of the extent to which hedge funds are available to retail investors, together with other information about fund activity and the regulatory framework under which this is taking place.

Capital guaranteed hedge fund products

36. There has also been an increase of hedge fund products marketed to institutional and retail investors that include either a guarantee on minimum performance or on the initial capital invested. Some market participants have indicated their unwillingness to market and/or provide hedging for capital guaranteed products given the difficulties of effectively hedging and pricing the performance guarantees. The offering firms are also exposed to losses if they are unable to disinvest quickly enough when the underlying funds underperform, and there can be conflicts of interests if the offering firm is at the same time acting as the prime broker to underlying hedge funds.

[22] Since some of the retail-oriented funds enable investors to withdraw their capital participation, disappointing returns could trigger mass withdrawals from these types of products, possibly with adverse market implications and/or efficiency consequences for the allocation of capital. This is also true of all mutual funds that offer investors the ability to sell units at short notice.

In-house hedge funds

37. In the past year, some banks, fund managers and insurance companies have created new in-house funds to add to their range of asset management products and to stem the outflow of leading managers to manage hedge funds. While there could be advantages to hedge fund activity taking place under the umbrella of a regulated institution, a number of potential risks have been highlighted:

- Recourse, conflicts of interest and reputational risks in the case of the failure of an in-house fund, and/or material losses being incurred within a regulated firm as a consequence;
- The potential for such funds to suffer from inadequate risk management/compliance procedures;
- The transfer of risk from regulated to unregulated firms and vice versa.

38. Some concerns have been expressed as to whether in-house hedge funds are appropriately structured to provide sufficient safeguards against prudential risks. To the extent that they are offered through authorised entities, such concerns fall within the realm of prudential oversight.

Terrorism financing and money laundering

36. In the aftermath of the tragic events of 11 September, international efforts have focussed on combating terrorism financing. One issue that has arisen in this context is the possible role of beneficial owners of investments in hedge funds. The US authorities (US Treasury, Federal Reserve and US SEC) are preparing a report that will contain recommendations for effective regulations to apply the Bank Secrecy Act on investment companies, hedge funds and personal holding companies. The report is expected to be completed by Autumn 2002. In addition, several provisions of the USA PATRIOT Act may require investment companies to have basic anti-money laundering procedures in place prior to that time. Reportedly, several hedge funds have enhanced their procedures to ensure that they are not unintentionally investing or laundering money for terrorists. The Managed Funds Association is preparing a set of best practices document, including on customer identification, some elements of which may be available in early 2002.[23]

V. Preliminary conclusions and issues

37. In last year or so there has been an acceleration of inflows into hedge funds. Although hedge funds have delivered lower returns than in the past, they have reportedly, on average, outperformed more traditional equity investment instruments, which has enhanced their attractiveness to investors. Increased institutional interest in hedge funds and funds of funds may also illustrate a desire to take advantage of different investment strategies, i.e., beyond more mainstream, benchmarked asset managers.

38. With new funds relatively small at inception, the average size of hedge funds has declined, as have the number of large funds. There appears to be more active efforts by fund managers to constrain the size of their funds (e.g., returning capital to investors, closing participation in funds), induced by economic incentives such as diminishing returns to size

[23] Wall Street Journal, 7 January 2002.

and lower liquidity for large trades in some markets. Size is considered an impediment to performance in that funds that are too large cannot enter and exit positions without moving the market.

39. On balance, concerns that HLIs could pose a systemic risk to the international financial system are less than before. Funds are smaller and are generally perceived to employ less leverage. Although the extent of improvements may be uneven, counterparty risk management with regard to hedge funds has improved as have HLI's own risk management practices. However, it is recognised that the information available to outside observers is not perfect, and there are always intangibles. There will be a need to ensure there is no backsliding in these broadly positive developments. On that basis, a number of actions are suggested for the FSF's consideration.

40. ***Although improved counterparty risk management and regulatory oversight*** has helped contribute to reduced ***leverage*** deployed in the international financial system, there is a need to guard against this being the result of a lack of opportunity and/or temporarily greater risk aversion, rather than a more fundamental shift in the appreciation of the risks involved. Regulated brokers/lenders acknowledge the role that regulatory oversight has played in buttressing standards of prudence and in resisting competitive pressures that inhibit their ability to demand the measures necessary to mitigate risks. Continued supervisory vigilance will be required to ensure that improvements in counterparty risk management practices are sustained.

- *Bank supervisors and securities regulators should continue oversight of regulated firms' relationships with large counterparties (including HLIs) and consider repeating at some stage the BCBS/IOSCO joint review of counterparty risk management practices. The timing of the latter might be reflected on in the context of the FSF's vulnerabilities discussion.*

- *A desire has been expressed for supervisory and regulatory authorities whose financial institutions have active relationships with hedge funds to share with supervisory colleagues in other jurisdictions more regularly their assessment of developments with regard to counterparty risk management practices in the HLI industry. This interest may be addressed by the Joint Forum's forthcoming work or in subsequent FSF discussions of potential vulnerabilities.*

41. There has been progress in the ***flow of information from HLIs to counterparties*** as well as to investors. HLI have become more transparent, though funds are understandably reluctant to disclose proprietary information on trading strategies. There will always be limits to the disclosures provided. Some private sector disclosure initiatives may, in time, take effect, in part through the demands of institutional investors. There has been some progress in taking forward the initial stages of voluntary ***public disclosure initiatives***, but little progress appears to have been made in actual implementation. No country has progressed mandatory public disclosure initiatives with regard to hedge funds. A number of authorities have found the lack of progress unsatisfactory. Some note that the inadequacy of hedge fund disclosure has made it difficult to assess the risk of excessive leverage or position concentration as well as the effectiveness of the FSF's recommendations.

- *The FSF could reiterate its support for broad implementation of the MWGED's recommended disclosures and continue to encourage the hedge fund industry and regulated institutions to adopt the MWGED recommendations. The FSF should welcome the Joint Forum evaluation of the degree to which regulated financial* *intermediaries and unregulated hedge funds have complied with the four major recommendations contained in the MWGED report and to examine the need for further follow-up on disclosure of financial risk.*

- *Although industry developments may have reduced the urgency in considering the appropriateness of introducing mandatory public disclosure by hedge funds on systemic grounds, these developments could reverse. National authorities should continue to be vigilant of prevailing market practices, to which the above-mentioned Joint Forum evaluation should contribute, and of new material developments.*

42. ***Market functioning issues:*** There have been no recent confirmed reports of instances in which HLIs have been at the centre of aggressive practices or have taken concentrated positions of a scale that have threatened the orderly functioning of markets. The smaller size of funds and improved differentiation among individual EMEs have been cited as contributing factors in muting market dynamics concerns. A few jurisdictions have expressed concerns about short selling by hedge funds (and others). And there are reports that hedge funds pursue the same (crowded) trades and employ significant leverage in specific strategies, particularly in convertible bond arbitrage. Others cite the positive benefits to market functioning of hedge funds having taken contrary positions.

43. A number of authorities observe that a lack of reliable information continues to hamper assessment of developments in hedge fund market and to identify potential sources of systemic risk. It is recognised, however, that infrequently reported data would be of little help in detecting the latter.

- *National authorities and international bodies should continue their monitoring of potential threats to market functioning posed by HLIs.*

- *National authorities should encourage foreign exchange market associations in their jurisdictions that have not already done so to adopt the good practices guidelines for foreign exchange trading.*

- *The FSF should encourage the GDSC to progress its work to strengthen and harmonise documentation, where appropriate. It should also encourage relevant authorities to strengthen the legal certainty of contracts.*

44. ***Retail-oriented Hedge Fund Products***. The marketing of hedge fund related products to smaller investors has raised questions from an investor protection perspective about the extent to which retail customers understand these products and the risks entailed.

- *It is recommended that IOSCO be encouraged to study the investor protection concerns that may arise in connection with hedge-fund products and retail investors and consider possible actions as necessary.*
- *Relevant authorities are encouraged to investigate how banks offering principal guaranteed hedge fund-related products measure and manage their exposures.*