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Role of hedge funds (highly leveraged institutions)

6.1 One of the main sources of pressure on the international financial system has come from the operations of a few very large hedge funds. The Committee took note of this fact and examined the nature and activities of hedge funds very closely.

Nature of hedge funds

6.2 The activities of Hedge Funds have been blamed by some commentators, at least in part, for the financial chaos which struck Asia during the Asian Crisis. These funds have fallen under suspicion because the small number of very large funds are individually capable of moving large amounts of capital into, or out of, an economy very rapidly. They have also been accused of using their large asset base to manipulate the market and force price changes favourable to their policies.

6.3 Hedge funds take a variety of forms and there seems to be no fixed definition which fits them all. In the United States, the Report of the President's Working Group on Financial Markets adopted the following description as a working definition:

> The term "hedge fund" is commonly used to describe a variety of different types of investment vehicles that share some similar characteristics. Although it is not statutorily defined, the term encompasses any pooled investment vehicle that is privately

> organised, administered by professional investment managers, and not widely available to the public.[1]

6.4 The Report commented that the primary investors in hedge funds are wealthy individuals and institutional investors and that fund managers frequently have a financial stake in the fund they manage. Hedge funds are commonly either limited partnerships or limited liability companies and are frequently located offshore from the economy in which they are investing.[2]

6.5 Goldman Sachs & Co. described the term 'hedge funds' as including:

> … a broad range of risk and return objectives. The common element among these strategies is the use of investment and risk management skills to seek positive returns regardless of market direction.[3]

6.6 In its submission to this inquiry, the Reserve Bank provided the following description:

> Their typical characteristics are: they are limited partnerships whose main function is investment management; they are generally run out of the US, though legally are domiciled in offshore tax havens; they do not solicit funds directly from the public or advertise, but attract investors by word of mouth; and they have high minimum investment levels, ranging between US$100,000 to US$5 million, with US$1 million common. These latter characteristics allow them to gain exemptions from various US federal securities laws, such as Securities and Exchange Commission (SEC) reporting, regulatory restrictions on leverage and trading strategies, and investor protector legislation.[4]

6.7 An article in the *Journal of Empirical Finance* explained that hedge funds are regarded as private investment vehicles for wealthy individuals or institutional investors. The investors are limited partners and the managers are general partners. The managers invest a significant proportion of their private wealth in the fund to ensure that economic interests are mutual. Fees are performance based and successful managers

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1 Report of the President's Working Group on Financial Markets, *Hedge Funds, Leverage, and the Lessons of Long-Term Capital Management*, US Government Printing Office, Washington D.C., April 1999, p.1.

2 Report of the President's Working Group on Financial Markets, *Hedge Funds, Leverage, and the Lessons of Long-Term Capital Management*, Washington, April 1999, p.1.

3 Goldman Sachs & Co. and Financial Risk Management Ltd, *Hedge Funds Demystified: Their Potential Role in Institutional Portfolios*, Pension and Endowment Forum, July 1998, p.5.

4 Submission No.7, Reserve Bank of Australia, 24 June 1999, Attachment 1, p.1.

command fees significantly above the normal fixed fee structure for mutual funds.[5]

6.8 The same article described the main difference between hedge funds and mutual funds as based on their different trading strategies. The authors noted that hedge funds used dynamic strategies, while mutual funds tended to a static 'buy and hold' strategy. In addition, hedge funds make extensive use of leverage in their investments. Hedge funds were described as typically using margin positions and short sales to leverage their bets. For mutual funds, access to leverage options is usually limited or restricted by their rules of operation.[6]

6.9 The main difficulties arise because, as described above, many hedge funds are not subject to the normal reporting and disclosure requirements faced, for example, by a bank. The Reserve Bank commented that the larger hedge funds are the only systemically important institutions not subject to regulation.[7]

6.10 The Financial Stability Forum Working Group on Highly Leveraged Institutions, produced a report in April 1999 which examined the activities of organisations described by IOSCO and the Basle Committee as: unregulated, opaque and large institutions which employ a high degree of leverage in financial markets. The Working Group observed that most of the institutions falling within this group were large, highly leveraged hedge funds.[8]

6.11 The Working Group report noted especially, that the use of leverage is a characteristic common to all of the institutions in their focus group and explained:

> Leverage typically arises because hedge funds use financial instruments (such as repos[9], futures and forward contracts and other derivative products) where positions can be established by posting margins rather than the full face value of the position. This leverage is established from relationships with financial institutions, either through counterparty transactions or through the use of prime brokerage services, … Hedge Funds only

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5 W. Fung and D. Hsieh, *A Primer on Hedge Funds*, Journal of Empirical Finance 6 (1999), p. 310.

6 W. Fung and D. Hsieh, *A Primer on Hedge Funds*, Journal of Empirical Finance 6 (1999), p. 314.

7 Submission No.7, Reserve Bank of Australia, 24 June 1999, Attachment 1, p.4.

8 Financial Stability Forum, *Report of the Working Group on Highly Leveraged Institutions*, 5 April 2000, p.7. http://www.fsforum.org/Reports/RepHLI.html

9 Repurchase Agreement: an exchange of securities for cash which will be reversed at an agreed date and price.

> infrequently obtain conventional loans from financial institutions.[10]

6.12 The Report also explained that obtaining a useful measure of leverage is difficult:

> Measuring leverage is neither straightforward nor synonymous with measuring risk … But, … high leverage (and the means through which it interacts with credit, market and liquidity risk) can give rise to significant concern.
>
> Evaluating the risk adjusted performance of hedge funds is difficult because of their dynamic trading strategies.[11]

6.13 The question of disclosure requirements weighs heavily in determining the financing arrangements for hedge funds. The Journal of Empirical Finance explained that a fund manager with a 'winning strategy' avoids arrangements which require high levels of transparency and disclosure (e.g. mutual funds). They opt instead for 'private vehicles' which have much lower transparency and disclosure requirements. This explains also why hedge fund membership is generally restricted to the wealthy, who are presumed to need little consumer protection in making investment decisions.[12]

The problems with hedge funds

6.14 Most of the funds, in fact, cause few problems but some of the larger funds are able to cause destabilising movements in the markets. A favourite tactic is to build up very large positions in a chosen market and, having influenced prices in their own favour, rapidly move those funds to another market or market sector. The Reserve Bank commented:

> A variety of strategies have been used by hedge funds. Some of these strategies have been designed not just to take advantage of expected price movements, but to *cause* price movements.[13]

6.15 The effect of these rapid movements of very large sums is to distort the normal adjustment of currency markets, causing them to 'overshoot' and

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10 Financial Stability Forum, *Report of the Working Group on Highly Leveraged Institutions*, 5 April 2000, p.9. http://www.fsforum.org/Reports/RepHLI.html

11 Financial Stability Forum, *Report of the Working Group on Highly Leveraged Institutions*, 5 April 2000, pp.7 & 10. http://www.fsforum.org/Reports/RepHLI.html

12 W. Fung and D. Hsieh, *A Primer on Hedge Funds*, Journal of Empirical Finance 6 (1999), p. 317.

13 Submission No.7, Reserve Bank of Australia, 24 June 1999, Attachment 1, p.4.

adding to the volatility of the market processes. The Reserve Bank explained:

> While there is only a small number of such funds, their investment approach of aggressive position-taking has the potential to exacerbate stresses in world markets. It should be of concern to policy makers that, as well as positioning themselves to take advantage of expected market developments (which is a perfectly legitimate activity), these funds at times also try to influence the course of those developments. Their ability to do this reflects not only the size of their position-taking relative to some of the markets in which they operate, but their influence on the behaviour of other market participants because of the reputation they enjoy.[14]

6.16 The activities of the hedge funds came under close scrutiny in the Asian crisis but assessments of their role are sharply divided. The Reserve Bank is of the opinion that the attitude in western countries was shaped by an IMF report *Hedge Funds and Market Dynamics*, which took a sceptical view of the hedge funds' role. The RBA's summation was that:

> … some might regard the actions of hedge funds as described by the IMF as the ultimate in destabilising behaviour: they came into a market that was already under intense pressure and sold a large volume, pushing the currency over the brink.
>
> Overall, the Bank's view is that the role of hedge funds in the events of 1997 and 1998 in the Asia/Pacific region have been dismissed too readily.[15]

6.17 The Reserve Bank submission also noted that at the beginning of the Asian crisis, the short position built up by the hedge funds in Thai baht was equivalent to almost 5% of Thailand's GDP. The Reserve Bank suggested that this can hardly be ignored, as it applied almost as much pressure to the Thai currency as the country's current account deficit – widely seen as a major cause of the crisis.[16]

6.18 In evidence the Reserve Bank commented that Australia had observed the activities of hedge funds in Australia, South Africa and Hong Kong and had expressed its disquiet about some of those activities:

> We were somewhat disturbed by what we saw and we mentioned this in various international forums, usually to relatively

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14 Submission No.7, Reserve Bank of Australia, 24 June 1999, p.2.

15 Submission No.7, Reserve Bank of Australia, 24 June 1999, p.3.

16 Submission No.7, Reserve Bank of Australia, 24 June 1999, p.2.

unsympathetic ears. We found ourselves very much on the side of our neighbours and felt they had a legitimate complaint to make about some of the activities of the hedge funds.[17]

Australia's experience with hedge funds

6.19 Despite the overall strength of the Australian financial system, it too was severely tested by the activities of the large hedge funds. A paper from the Reserve Bank highlighted the disruptive effects of their activities in 1998:

> … the activities of hedge funds came to dominate the market during the middle of the year, affecting the dynamics of price discovery for the period while this dominance continued. This occurred despite the fact that the Australian dollar is floating, so that there was no fixed exchange rate to attack as there was in Hong Kong or, …, in the UK in 1992.[18]

6.20 Australia's floating exchange rate is intended to insulate the economy from the shocks transmitted by changes in the terms of trade. In normal circumstances the Reserve Bank does not interfere with these fluctuations – it intervenes only when the fluctuations are wider than expected, given the underlying economic circumstances; i.e. when the currency is overshooting instead of returning to a stable equilibrium. In evidence, the RBA said:

> The danger with the fixed exchange rate is that it is brittle. It is either working perfectly or it collapses. …
>
> The centrepiece of any risk strategy, I think, if you can do it – and some countries cannot do it – is to have a floating exchange rate where people are accustomed to exchange rates going up and down and where borrowers, particularly corporations and banks, understand foreign currency risk.[19]

6.21 The hedge funds sought to take advantage of the Reserve Bank's restraint in the midst of the Asian crisis in mid-1998. In a situation where the Australian dollar was already falling in value, the major hedge funds established very large "short" positions in the Australian dollar; i.e. they were selling not only their own holdings of Australian currency but

17 Evidence, Reserve Bank of Australia, 9 February 2000, p.6.

18 Bob Rankin, *The Impact of Hedge Funds on Financial Markets: Lessons from the Experience of Australia*, Reserve Bank of Australia, Paper prepared for the RBA Conference on Capital Flows and the International Financial System, Sydney, 9-10 August 1999, p.1.

19 Evidence, Reserve Bank of Australia, 9 February 2000, p. 5.

entering into contracts to sell currency they did not yet own (covered by credit from the banks). The aim of this strategy was to sell at say US$0.70, force the dollar's value down even further, then buy it back at a lower price (say US$0.68), settle the amounts they had borrowed and make a large profit on the transactions.

6.22 A central factor in the hedge funds' strategy was their expectation that the Reserve Bank would not be able to intervene effectively because of the huge volume of currency available to the funds (their borrowings alone were estimated at $12 billion in May 1998). As their first move, the funds let the rest of the market know that they intended to attack the Australian dollar and, predictably, the news increased uncertainty in the market and effectively deterred potential buyers. The funds relied also on the phenomenon of "herd behaviour", where market participants either follow en mass when a new strategy is applied or sit back and wait to see what others are going to do:

> The key features of hedge funds' activities were the signalling to other market players that they were about to attack the $A (a move which heightened uncertainty and deterred potential buyers from remaining in the market); lowering offer prices in the brokers even though they were able to sell all they had on offer at the existing price; and concentrating sales into periods of thin trading. One consequence was that exporters, who had been keen buyers of $A at higher levels, not only stopped buying but began to sell in the expectation that the exchange rate would fall further – a classic example of herd-like behaviour.[20]

6.23 In this instance the herd behaviour took the form of waiting to see what the hedge funds would do. Even exporters, who would have been expected to buy strongly in response to the low value of the dollar, were selling. Many exporters had been caught out by buying in at higher values, thinking the market had already reached the bottom. For the Australian market generally this was a bad period, because the reluctance of buyers removed liquidity from the system at a time when it was vitally needed. This became even more serious when, influenced by pessimism about low commodity prices, the Australian dollar began to fall against even weak currencies.

6.24 When the exchange rate fell outside the range regarded as reasonable for the ruling economic conditions, the Reserve Bank intervened in the market. The RBA spent $A 2.6 billion in three days buying Australian currency. When the hedge funds did not renew the assault, other buyers returned to the market and the pressure receded.

20 Submission No.7, Reserve Bank of Australia, 24 June 1999, p.3.

6.25 Over the fifteen years prior to 1998, the value of the Australian dollar fluctuated widely around a mean value of US 73cents. At the worst period of the hedge funds' attack, it fell to US 55.3cents. At that point, in addition to the activities of the Reserve Bank, the hedge funds found their credit from the banking system restricted in the wake of the near-collapse of the giant hedge fund Long-Term Capital Management.

6.26 This fund, managed by several winners of the Nobel Prize for Economics, came close to bankruptcy. It was rescued by a consortium when the US banking system decided in effect that it was "too big to be allowed to fail". For the hedge funds as a group, it signalled the beginning of a more cautious approach to credit on the part of the banking system and an end to their efforts to force down the value of the Australian dollar. The Reserve Bank commented to the Committee that:

> I think that when that collapsed … it was important enough to actually cause the US Fed to change monetary policy. I have to say as well that that the collapse of Long term Capital Management actually took a lot of the pressure off. I think it punctured the reputation the hedge funds had. Hedge funds were able to be effective because they had an enormous reputation, all or most of which flowed from the collapse of sterling in 1992, which was attributed to the hedge funds.
>
> People were saying, 'Aren't the hedge funds powerful?' and, even more worryingly, 'Aren't they always right?' Once they got this reputation it became very easy for them to borrow money and very easy to take big positions and very easy to get other people to imitate them, thinking that they are bound to make money if they do what the hedge funds do. So for a time they were quite formidable. But I think that is not the case now. I think with the collapse of Long Term Capital Management and the fact that some of the others have done very badly and got a few bets wrong, some of them are now a lot smaller than they were, at least for the time being they have become a much smaller force than they were in 98.[21]

6.27 The Reserve Bank expressed its concern over this deliberate attempt to manipulate the $A and called attention also to earlier examples of similar activity. One example was the sharp change in the US$/Yen exchange rate in 1998, described by the Bank as one of the largest changes in a major country's exchange rate since the start of floating about 30 years ago. The rate fell about 25% in a little over a month, of which 15% occurred in 30 hours. The Bank suggested that it was significant that: "The timing of the

21 Evidence, Reserve Bank of Australia, 9 February 2000, pp. 6-7.

move and the feedback from the market makers both pointed directly to the central role of hedge funds …".[22]

6.28 The submission from the Reserve Bank explained the dangers of this type of price manipulation:

> Australia has fully open markets, and market participants are free to buy or sell as they see fit. Nonetheless, the size of the positions taken by hedge funds, in Australia (and even more so in Hong Kong and Thailand) and their apparent intention to then force a change in the price, raises concerns about the possibility of market disruption. Notably, they were not merely transacting to take advantage of expected events but were doing so in a way which seemed intended to try to influence the course of events, posing a risk to market integrity.[23]

6.29 In evidence to the Committee, Dr John Edwards observed that the actions of the hedge funds in 1998 had made the Australian currency much more volatile than it need have been. He added that had the funds been more successful, they could:

> … have forced the Australian Reserve bank into monetary policy actions that would have had a very unfavourable effect on domestic growth. Even though we escaped the capital inflow issues of the Asia crisis, we ourselves did demonstrate a vulnerability to the impact of highly leveraged institutions.[24]

Action required

6.30 Some commentators argue that legislative restraints should be placed on the activities of the hedge funds. Others argue just as passionately that the bulk of the hedge funds are misrepresented by being included with the giant funds and should not be punished for the activities of a few. Still other commentators suggest that the activities of hedge funds are little different to those of commercial and investment banks and that the average gearing of hedge funds is lower than that of those banks. The Reserve Bank's response to this approach was that:

> These comparisons are of very limited value because:

22 Submission No.7, Reserve Bank of Australia, 24 June 1999, p.4.

23 Submission No.7, Reserve Bank of Australia, 24 June 1999, p.4.

24 Evidence, Dr J. Edwards, 22 March 2000, p.96.

- the bulk of hedge funds, particularly the global macro funds which are generally identified with recent financial crises, do not report their gearing; and
- the figures that are reported are based on balance sheet totals. Since it is widely acknowledged that hedge funds rely principally on off-balance sheet techniques (futures, forward contracts etc) to obtain leverage, the reported figures are largely meaningless. (Note that the reported figures are not audited in any way.)[25]

6.31 The RBA added that there is no reliable data on the gearing of hedge funds generally. The only fund for which information is available is Long Term Capital Management (the fund which almost collapsed) and it indicated a very high level of gearing of 25:1 even before the crisis, and outstanding contracts to a value of about 300 times the fund's capital.[26]

6.32 The Reserve Bank commented on the relative business approaches of the hedge funds and other financial organisations, such as banks:

> … comparisons between hedge funds and commercial and investment banks based purely on gearing ratios are misleading, as they do not take into account the very different business approaches of the various types of institutions. The great bulk of commercial and investment bank balance sheets are devoted to supporting client businesses rather than position taking. … In contrast, hedge funds' positions are concentrated and centrally controlled. … individual positions of banks tend to be smaller and less strongly held, and therefore less likely to have effects on markets. Also banks are mindful of their wide-ranging relationships with governments and businesses … and therefore less inclined to pursue strategies which could disrupt a country's markets and harm the bank's reputation. Hedge funds, in contrast, have no on-going relationships with most of the countries in which they trade and hence can be purely opportunistic.[27]

6.33 The RBA argued that the relative size of the asset bases of hedge funds and other financial institutions (such as banks, mutual funds, life offices, etc) is not the main determinant of their influence in the market. Although hedge funds have a smaller asset base than a bank, for example, they achieve greater market influence (or leverage) through the use of off-balance sheet transactions. The most potent factor is the ability of hedge

25 Submission No.7, Reserve Bank of Australia, 24 June 1999, pp.4-5.

26 Submission No.7, Reserve Bank of Australia, 24 June 1999, p.5.

27 Submission No.7, Reserve Bank of Australia, 24 June 1999, p.5.

funds to change their position rapidly. Banks have limited asset mobility because their main business is not position-taking in the market. Similarly, institutions such as mutual funds, life offices and pension funds are constrained by the industry benchmarks they follow.[28]

6.34 The Financial Stability Forum Working Group made an assessment of the systemic risks posed by hedge funds and other highly leveraged institutions. It divided its approach into two main categories:

> First, how best to address and reduce risks arising from the accumulation of leverage – and its interaction with other risks – to levels that pose systemic threats.
>
> Secondly, how to lessen the potential market and economy wide impact of the sudden and disorderly collapse of an unregulated [highly leveraged institution].[29]

6.35 The Group highlighted the potential problems for financial system stability, posed by highly leveraged positions:

- where risk exposure is increased, the enterprise is more exposed to positions which turn against it;
- if the firm defaults, the unwinding of its position could affect the solvency of its creditors; and
- leveraged positions are much more exposed if losses occur from credit, market or other risks – less capital is available to deal with the loss. This might mean rapidly closing out a position and producing exaggerated price effects.[30]

6.36 Leverage allows a larger position than the market conditions would normally justify. Unwinding these large positions can amplify the price effects and increase market volatility – this, in turn, can produce unpredictable price fluctuations in other markets. Once this process begins, it can affect the positions established by the firm itself and its counterparties.[31]

6.37 Commenting on the near-collapse of Long Term Capital Management, the Financial Stability Forum's Working Group drew attention to the failure of risk management assessments by the fund itself and by its counterparties. The Group's report noted that:

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28 Submission No.7, Reserve Bank of Australia, 24 June 1999, p.5.

29 Financial Stability Forum, *Report of the Working Group on Highly Leveraged Institutions*, 5 April 2000, p.12. http://www.fsforum.org/Reports/RepHLI.html

30 Financial Stability Forum, *Report of the Working Group on Highly Leveraged Institutions*, 5 April 2000, p.15. http://www.fsforum.org/Reports/RepHLI.html

31 Financial Stability Forum, *Report of the Working Group on Highly Leveraged Institutions*, 5 April 2000, p.15. http://www.fsforum.org/Reports/RepHLI.html

> Due diligence in individual credit decisions is the constraint on leverage, both at any one firm and in the economy as a whole, in a market economy. If a counterparty of an individual lender provides insufficient information for this judgement to be made, … , that credit provider should limit exposures accordingly. But that did not happen.
>
> … it is clear that collateral practices failed appropriately to assess and provide for future credit exposures …, partly through underestimation of the interaction of market risk, market liquidity risk and credit exposures. In an environment in which the complexity of risk exposures and their interaction is growing, it is worrying that even the most sophisticated firms should have been unable to assess this potential and limit exposures accordingly.[32]

6.38 The international financial authorities and the regulators in countries such as the G7 members, seem to have concluded that attempts to directly regulate hedge fund activities will not achieve the desired aims.

6.39 The balance of opinion is in favour of requiring greater transparency from sectors, such as banking, which provide the hedge funds with the financial backing which underpins their leverage. The Reserve Bank indicated that it is in general agreement with this approach:

> … We are probably inclined to think it would be too difficult to regulate them and that you can probably achieve most of what you want by relying on disclosure rather than regulation. It is probably not, at this stage, necessary to go down the regulation path. … At the moment we think enough is being done internationally in terms of re-examining their role and trying to improve disclosure.[33]

6.40 To reinforce that policy, there is also strong support for proposals that organisations offering derivative products be required to provide complete disclosure of the product details. This would especially include details of the product's risk profile. The availability of this additional information would enable investors to make a proper assessment of the product and its risks. This, in turn, would reduce the likelihood of firms becoming overexposed to adverse market changes. The Reserve Bank commented:

> Following the events of 1998 I think the international community looked at problems in two respects: one was to examine the

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32 Financial Stability Forum, *Report of the Working Group on Highly Leveraged Institutions*, 5 April 2000, p.16. http://www.fsforum.org/Reports/RepHLI.html

33 Evidence, Reserve Bank of Australia, 9 February 2000, p.7.

> relationship between hedge funds and the people who were lending to them, mainly banks, and the other was to look at the degree of disclosure that hedge funds submitted to. … one of the problems was that because the hedge funds had developed such a powerful reputation and were putting so much business through the financial markets, banks were very keen to do business with them and lending to them on terms that demanded much less disclosure than banks would typically require of other customers.[34]

6.41 Reflecting this convergence of opinion, the Financial Stability Forum Working Group on Highly Leveraged Institutions (HLI), included in its report a range of recommendations designed to promote and sustain adjustments in firm behaviour and to enhance market discipline.

6.42 In summary, the recommendations proposed:

- stronger counterparty risk management;
- stronger risk management by hedge funds;
- enhanced regulatory oversight of HLI credit providers;
- greater risk sensitivity in bank capital adequacy regulation;
- sustaining industry progress in risk management;
- building a firmer market infrastructure;
- enhanced public disclosure by HLIs;
- enhanced public disclosure practices generally;
- enhanced national surveillance of financial market activity; and
- the establishment of good practice guidelines for foreign exchange trading.

6.43 The Financial Stability Forum referred the Group's report and recommendations to the G7 and G20 Ministers and Governors, the heads of the IMF and the World Bank. The Forum urged these bodies and others mentioned in the Group's report, to consider the recommendations promptly and take action to implement them.

34 Evidence, Reserve Bank of Australia, 9 February 2000, pp.7-8.

Recommendation 6

6.44 **The Committee recommends that adoption of the proposals of the Financial Stability Forum Working Group on Highly Leveraged Institutions, should be given urgent consideration. The proposals are that there should be:**

- **stronger counterparty risk management;**
- **stronger risk management by hedge funds;**
- **enhanced regulatory oversight of Highly Leveraged Institution credit providers;**
- **greater risk sensitivity in bank capital adequacy regulation;**
- **sustained industry progress in risk management;**
- **a firmer market infrastructure;**
- **enhanced public disclosure by Highly Leveraged Institutions;**
- **enhanced public disclosure practices generally;**
- **enhanced national surveillance of financial market activity; and**
- **established good practice guidelines for foreign exchange trading.**