

# HEDGE FUNDS AND THEIR CONTRIBUTION TO SECURITIES MARKETS

Matthew Harrison, SVP HKEx, CSU Research & Policy

1 June 2000

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#### **EXECUTIVE SUMMARY**

This report seeks to examine the available facts about the hedge fund sector and give a balanced description of the nature and operations of the sector, and its contribution to securities markets. Popular perceptions of hedge funds focus on their potential to cause systemic instability. However, a more balanced view should take account of the essential rationality of the hedge fund investment strategy. An optimal policy stance would accept the benefits of hedge fund participation in markets, and seek to address systemic concerns in ways other than by restricting the sector. This report seeks to contribute to the formulation of such a policy stance for Hong Kong.

The image of hedge funds, both among regulators and in the popular imagination, is negative. Hedge funds are widely seen as a cause of the 1997/98 Asian financial crisis. Perceived as large, secretive, highly leveraged institutions, hedge funds were believed to have manipulated securities and currency markets, making profits at the expense of systemic stability. There have been calls for a coordinated regulatory response to the threat posed by hedge funds.

Examination of the facts on the hedge fund sector reveals another side of the picture.

Hedge funds are loosely-regulated private pooled investment vehicles that can invest in both cash and derivatives markets on a leveraged basis for the benefits of their investors. Hedge funds pursue a wide range of investment strategies. These strategies can be classified broadly as follows.

- Fundamental long/short funds, which invest long or short in securities that appear mispriced based on analysis of the business prospects of the issuing firms.
- Quantitative long/short funds, which apply statistical analysis to historical data to identify opportunities to capture unusual returns.
- Arbitrage/relative value funds, which seek to identify mispricings or expected return differentials between related securities which are not due to the business prospects of the issuers.
- Macro funds, which take exposures to economies or currencies on a global basis.
- Funds of funds, which invest in a portfolio of underlying hedge funds to achieve diversification.

The main differences between hedge funds and traditional mutual funds are that hedge funds adopt a wide range of strategies, instead of taking long-only positions; hedge funds seek an absolute return rather than a return relative to a market benchmark; they are managed on a performance fee basis; and the hedge fund manager will invest his own capital in the fund alongside that of his clients. The overall hedge fund value proposition is thus an attractive and rational one.

Many investors, especially high net worth individuals, have been attracted to the sector by the high and relatively steady returns achieved. Even traditional investing institutions are starting to allocate a portion of their assets to hedge funds in order to diversify and lower the overall risk of their portfolios. Notwithstanding the rather negative popular image of the sector,

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hedge funds have expanded rapidly in recent years, some estimates suggesting that there are as many as 6,000 funds managing US\$450 billion of capital.

There have been widespread concerns about the role of hedge funds in financial crises, especially the 1992 European currency crisis and the 1997/98 Asian financial crisis. The 1998 collapse of the large highly leveraged hedge fund LTCM prompted regulators worldwide to review the sector. However, the evidence that hedge funds caused the various financial crises is scanty. IMF and academic studies suggest that a larger role was played in these crises by domestic institutions. The financial systems that experienced these crises were in many cases seriously misaligned, and could not have been sustained indefinitely in their pre-existing form. In any event, this phase of the regulatory debate on hedge funds appears to be drawing to a close without any coordinated attempt to restrict the sector further.

Looking forward, it appears likely that the hedge fund sector will continue to grow. Hedge funds offer to investors an attractive and rational value proposition, that is superior in many respects to that of traditional mutual funds. Testimony to the attractiveness of this value proposition is provided by the fact that, driven by client demand, traditional fund houses are starting to add hedge funds to their offerings. A further step may be to permit retail investors more access to hedge funds, especially funds of funds that offer diversification.

Although public discussion has focused on hedge funds' potential to disrupt markets, there are potential benefits from hedge fund participation. Because hedge fund strategies differ from mainstream mutual funds, they diversify demand and hence make markets more liquid. Hedge funds can also contribute significantly to price formation and efficiency of pricing. Specialist funds can be a major source of liquidity for non-mainstream sectors, such as emerging markets and distressed securities. And those funds that trade higher volumes seeking to capture small profit opportunities exert pressure for efficiency in market structure and lower execution costs that are beneficial overall.

Finally, those markets that become a base for hedge fund management draw significant benefits. Hedge fund managers are often the stars of their profession, and contribute their knowledge to the local community through skill transfer and their service demands of the intermediaries.

At present, Hong Kong is not positioned to draw full benefit from the likely worldwide growth of the hedge fund sector. Only a small number of hedge fund managers operate in Hong Kong. Although many more participate as investors and traders in the Hong Kong market, some restrictions, for example on short selling and futures margins, are unhelpful. It appears that most money from Hong Kong investors interested in hedge fund opportunities is currently channeled overseas. Although on the whole Hong Kong is probably more attractive than other regional markets to hedge fund participation and as a base for hedge fund management, the Hong Kong authorities have sometimes been less than welcoming. If Hong Kong wishes to be the leading financial centre in the region, it will need to recognise the significant and growing contribution to be made by hedge funds.

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#### INTRODUCTION

Hedge funds have attracted a negative press. They were widely blamed for the Asian financial crisis which began with the collapse of the Thai baht in July 1997. Malaysian Prime Minister Mohammed Mahathir struck a popular chord when he described them and other highly leveraged institutions as "highwaymen of the global economy<sup>1</sup>". In August 1998, the Hong Kong Government launched its historic intervention in the stock and futures markets to counter an alleged "double play" by hedge funds against the Hong Kong dollar. The collapse of giant hedge fund LTCM the following month – although unrelated to events in Hong Kong – seemed to confirm everyone's worst fears. And in the aftermath of the crisis, international institutions, including IOSCO and the G-7, sought to strengthen the international financial architecture to minimise the chance for such disruption in the future. Hedge funds are a favourite target of critical comment.

There is also a popular perception, which may be somewhat inconsistent with the above, that the hedge fund sector is declining following the LTCM fiasco as counterparties withdraw credit from the funds and investors withdraw capital.

This report examines the available facts and seeks to establish the actual nature of the hedge fund sector. The report considers how hedge funds can be defined, and looks at their historical development, and current status of their operations around the world. It gives a description of the establishment and operation of a "typical" hedge fund. The second section of the report summarises the regulations that apply to hedge funds in key jurisdications. The third section looks at recent events, such as the Asian crisis, and the role that was played by hedge funds. The fourth reviews the LTCM crisis and the responses of regulators. The fifth looks at issues and perceptions regarding hedge funds. The sixth looks at possible future developments. And the final section sets out some points for a possible agenda for Hong Kong in responding to the development of hedge funds.

The report is based on research conducted during 1999 and early 2000. The work done included searches of physical and electronic literature and studies, and interviews and conversations with selected hedge fund managers, advisers, prime brokers and regulators based in Hong Kong and overseas. It should be noted that the publicly available information on the sector is quite limited. Further, many of the issues discussed in the report are complex and controversial, and in limited space it is not possible to deal adequately with all points of view

#### 1. WHAT IS A HEDGE FUND?

#### 1.1 Definition

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Hedge funds have been defined as loosely regulated private pooled investment vehicles that can invest in both cash and derivative markets on a leveraged basis for the benefits of their

Highwaymen of the global economy, Mahathir, Asian Wall Street Journal, 23 September 1997.

#### investors<sup>2</sup>

Hedge funds are not a legally or officially-recognised category of investment. In fact, hedge funds tend to be designed to minimise regulatory implications. One way to define hedge funds, therefore, is in terms of what they are not. Traditional investment funds tend to be *long-only* ie holding long rather than short positions, to be *restricted* in the strategies that they may undertake, ie the use of futures and options or leverage or short selling is limited or not permitted at all, and to aim at *relative returns*, ie returns relative to some benchmark index. The greater part of the traditional fund's return will therefore derive from the market itself, while the fund manager's skill (or lack of it) may add (or subtract) a few percentage points. In contrast, hedge funds aim at an absolute return, ie a return of say 12 to 20 per cent per year every year, regardless of the market movement. To achieve this return the hedge fund may adopt a much broader range of strategies, including going short or taking out futures and options positions. The return earned by the hedge fund therefore tends to reflect the manager's skill rather than the movement of the underlying markets.

Another point of difference between traditional funds and hedge funds is in the incentive/remuneration mechanism. A typical long-only fund may charge a management fee of 1% per annum. There may also be a charge for entry or exit from the fund. However, a hedge fund, in addition to a 1% management fee, will typically charge performance fee of, say, 20% of the gains achieved. Some funds charge in accordance with a "high water mark" mechanism whereby in case of losses the fund first has to make good the losses before the performance fee can be charged again. There is evidence that funds with the high water mark mechanism perform better than other hedge funds<sup>3</sup>. While traditional funds tend to require their managers to be independent of the fund's operations, the hedge fund manager makes a virtue of his involvement: by investing his own capital in the fund he demonstrates commitment and helps ensure alignment of his objectives with those of his investors. It may be said that while a traditional fund has high market risk but low manager risk, in a hedge fund there is high manager risk and low market risk. Thus it makes sense for the investor to diversify his holdings of hedge funds.

A more detailed comparison between traditional mutual funds and hedge funds is set out below.

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Thomas Schneeweis, *Dealing with the Myths of Hedge Fund Investment*, Journal of Alternative Investments, Winter 1998, page 11.

On the Performance of Hedge Funds, Bing Liang, Financial Analysts Journal, July/August 1999. (Bing Liang)

#### Comparison between mutual funds and hedge funds

	Traditional fund manager	Hedge fund manager
Strategy?	Long only	Long and short
Objective?	Relative return	Absolute return
Investment universe?	Narrower	Broader
Holdings	Diversified	May be concentrated
Leverage?	No	Yes
Derivatives?	No	Yes
Concern for efficient execution	Lower	Higher
Remuneration?	% of assets	Success fees (20% of gains, high water mark)
Own capital?	No	Yes
Public?	Yes	No

Some commentators define "hedge fund" as a subset of the universe of *alternative investments*, the other types being managed futures funds, and managed currencies. However, other commentators consider the term "alternative investments" to have a broader meaning, applying to all investment media other than long equity – ie including property and bond investment.

From the above, it can be seen that it is difficult to define the hedge fund sector. On the one hand there is great diversity within the sector itself. On the other, there is no clear dividing line between hedge funds and other kinds of investor. Institutional and individual investors adopt many of the strategies of hedge funds, such as use of options, leverage and short selling. Investment banks, in particular, are highly leveraged, and their trading desks operate with great freedom over a range of financial markets. Even "conservative" institutional investors, such as pension funds and college endowment schemes, tend to invest a portion of their assets in hedge funds. This has been one of the problems facing financial regulators seeking to restrict the activities of certain kinds of hedge fund. Regulators have coined the term "highly leveraged institution" or HLI to describe the kinds of entity they are concerned about, but this definition is not co-extensive with the hedge fund population. Many hedge funds are not highly leveraged; many other institutions are.

#### 1.2 Investment styles

Hedge funds can be categorised according to their investment style. One categorisation<sup>4</sup> divides hedge funds accordingly.

1. **Fundamental long/short funds**. These funds trade securities that appear mispriced based on analysis of the business prospects of the issuing firms. The approach is therefore similar to that of the traditional fund manager; the difference is that the hedge funds in this category will short stocks felt to be overpriced, and will use leverage to magnify returns. Funds in this category may focus on certain sectors or

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The Reality of Hedge Funds, Warburg Dillon Read, October 1998 ("Warburg"), pages 12 to 15.

markets, or on certain classes of securities such as distressed securities. It is possible to run such funds on a market neutral basis, ie such that shorts in a sector exactly balance longs. However, perfect market neutral is rare. It appears that during bull markets in particular asset classes, eg US stocks in the mid-1960s, and the 1990s, hedge funds often find it difficult to stick to the market neutral principle and become net long and leveraged, with the result that they suffer in the subsequent market declines<sup>5</sup>.

- 2. Quantitative long/short funds. These apply statistical analysis to historical data (ie price data as well as accounting data) to identify opportunities to capture unusual returns. The resulting hypotheses are back-tested against the available data, and then incorporated in a trading model. The model is followed mechanically, with perhaps occasional judgemental override by the manager. Typically the returns achieved are small, and so are amplified by leverage. Since the quantitative strategy involves considerable precision, care is usually taken in hedging risks such as market risks that are not targeted by the strategy. Thus quantitative funds tend to be market neutral. Considerable academic input may go into the development of these trading models; in consequence quantitative funds tend to be secretive.
- 3. **Arbitrage/relative value funds**. These funds seek to identify mispricings or expected return differentials between related securities which are not due to the business prospects of the issuers. Examples include merger arbitrage and convertible arbitrage. Such strategies tend to be carefully constructed so as to target the exposure sought and avoid other exposure, hence such funds tend to be market neutral. They also tend to be leveraged to magnify what may be small returns.
- 4. **Macro funds**. Macro fund strategies are driven by the manager's views about global economic events. Typically, futures and forwards are used to take positions on bond markets, equity markets or currencies. Macros are thus to some extent hybrids of funds in other sectors. In some cases a form of arbitrage is attempted, for example, shorting the low interest rate yen and using the proceeds to buy higher-yielding Treasury bills, the so-called yen carry trade. However, it is usually difficult to hedge such positions, and indeed many macro funds were hurt by the rise of the yen in October 1998. Consequently, most macro funds adopt low leverage.
- 5. **Funds of funds** are funds which invest in other hedge funds. They seek to invest in better-performing hedge funds and those which offer diversification of returns. Hence funds of funds tend to be the lowest risk form of hedge fund.

Taking a somewhat different approach, the Mar/Hedge database categorises funds into eight broad investment strategies: macro funds, global funds, market neutral funds, sectoral funds, short sales funds, event-driven funds (ie funds seeking opportunities arising from corporate events such as merger, insolvency and restructuring), long-only funds and funds of funds.

See Appendix 1 for a fuller taxonomy of 28 recognised hedge fund investment styles.

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Warburg, page 9.

#### 2. HISTORICAL DEVELOPMENT AND CURRENT STATUS

#### 2.1 Historical development

Private investment partnerships have been in existence since investment began. However, the term *hedge fund* can be traced to 1949 when sociologist and journalist Alfred Winslow Jones established the Jones Hedge Fund. Jones's fund combined traditional long positions with short positions in stocks in the same sector, thus insulating or "hedging" the fund's return against market movement. The return earned by the fund would thus depend on the manager's skill in stock selection rather than on market movement, the manager aiming at an absolute rather than a relative return. Jones introduced a management fee of 20% of profits realised by the fund, and agreed to keep his own capital in the fund. In 1952 his fund was reorganised as a limited partnership.

Jones's fund thus established the key features – hedging strategy, absolute return, incentive fees, limited partnership - that characterise the hedge fund industry to this day. Perhaps ironically, the feature that has survived least well is the hedging itself. Many of today's funds are not fully hedged against market movements.

The hedge fund sector grew rapidly during the bull market of the mid-1960s, investor interest having been stimulated by a 1966 Fortune article by Loomis. A survey conducted by the US SEC in 1968 found 215 investment partnerships of which 140 were identified as hedge funds. However, with the market downturn that followed, the sector declined: assets under management by the 28 largest funds had decreased by 70% by 1970 and many funds went out of business. The industry experienced a resurgence in the 1980s. The Tiger Fund, in particular, gained favourable publicity after making large gains on a global macro play on its predicted decline of the US dollar. Subsequently, hundreds of hedge funds started up. And in the 1990s, as many investors looked for diversification from the booming US equity market, the sector expanded further.

Many hedge funds experienced a difficult period in the wake of the September 1998 collapse of LTCM. Lenders became reluctant to finance them. Many investors reduced their exposure to the sector, while those that remained demanded better disclosure from their managers. However, these negative trends were counterbalanced by rising underlying demand for alternative investment exposure. It has become conventional wisdom for big established institutional investors such as pension funds or insurance companies to place a few percentage points of their portfolio with hedge funds. And the traditional fund managers are themselves launching in-house hedge funds to meet the demand from their clients.

While there have been some well-publicised cases of hedge fund failure, the proportion of such failures appears to be relatively small<sup>6</sup>. Most closures appear to relate to mergers or

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Hedge Funds and Financial Market Dynamics, (HFFMD) May 1998, page 33. Also, Warburg finds less than five failures of significant sized funds in the turbulent months preceding October 1998, and that many funds performed well (page 26-27). For a contrary view based on analysis of offshore funds over the period 1989-95 – namely, that hedge funds exhibit a high attrition rate – see Offshore Hedge Funds, Survival and Performance, 1989-95, Brown, Goetzmann, Ibbotson, February 1998.

restructurings of partnerships, retirement of managers, etc, rather than because of large incurred losses. In the early months of 2000, three well-known managers of large funds – Julian Robertson (Tiger Fund), George Soros and Stanley Druckenmiller (Quantum) announced their withdrawal from the sector. Yet their withdrawal may only signify the end of a style of investing which they personified: taking big bets, such as Soros's successful venture against the British pound in 1992. Smaller, more diversified, more technical operators appear to be flourishing.

#### 2.2 **Current status**

#### Size of sector

It is not possible to be very precise about the hedge fund sector because of the lack of comprehensive hard data. Periodic data on selected populations of funds is available from companies like Mar, Hedge Fund Research, and Van Hedge Fund Advisors. However, partly because of the difficulties in defining the sector (see 1.1 above) these sources are not necessarily comprehensive. The information is also unaudited and reporting is voluntary. Because of these limitations, one analyst states that in order to arrive at a good estimate of the total population it is customary to multiply statistics compiled from known sources by a factor of three<sup>7</sup>!

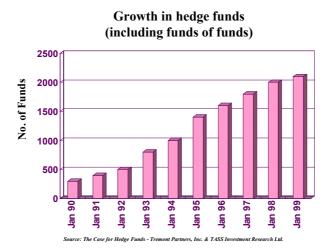
Combining 1997 data from Mar and Hedge, a 1998 IMF study<sup>8</sup> found 1,115 hedge funds in operation, of which 262 were funds of funds. Including funds of funds, the capital managed amounted to US\$110 billion (US\$90 billion excluding funds of funds). acknowledged that this figure was likely to be on the low side. The Report of the President's Working Group on Financial Markets<sup>9</sup>, commissioned in the wake of the LTCM fiasco, states that a "a number of estimates" (no references are given) indicate that as of mid-1998, there were between 2,500 and 3,500 hedge funds managing between US\$200 billion and US\$300 billion in capital, with around US\$800 billion to US\$1 trillion in assets. Tremont estimate as of mid-1999 that there are 5,000 funds in the whole industry managing US\$325 billion in capital, of which 90% is managed by some 2,600 funds. By second guarter of 2000, one estimate was of 6,000 funds managing US\$450 billion of capital<sup>10</sup>.

Warburg, page 20.

HFFMD, page 6.

Hedge Funds, Leverage, and the Lessons of Long Term Capital Management, Report of The President's Working Group on Financial Markets (RPWG), April 1999, page 1.

Sinking fortunes, Financial Times, 5 May 2000.



The above does not include Commodity Trading Advisers (CTA) accounts

Even if these larger estimates are reasonable, it is clear that the hedge fund sector is still a small component of the total investor universe. The Working Group report cites various classes of US institutional investor which collectively held assets exceeding US\$19 trillion (not excluding double counting).

#### Location

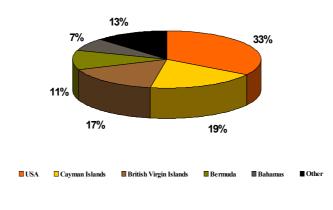
Most hedge funds are controlled and operated out of the USA. Europe is a second and growing location. In Europe, London is a preferred base to manage a fund because of the concentration of investment professionals there, and because the tax and regulatory environment is considered acceptable. Germany, in contrast, is understood to have only one hedge fund manager because the taxation and regulatory burdens are too great<sup>11</sup>. A small number of funds are managed out of Asia, particularly Hong Kong and Singapore. The Singapore authorities have many measures to encourage fund managers to base their operations on the island, and, if not specifically welcoming hedge funds, have at least not attributed the Asian financial crisis to them. Hong Kong is an established fund management centre and has the attractions of its openness, liquidity and market size. However, the Hong Kong authorities have perhaps been less welcoming to hedge funds than their Singapore counterparts. Japan is a significant target market for hedge funds, because of its size and liquidity and, perhaps, because of the opportunities generated by current liberalisation on top of historical anomalies. However, it is not uncommon to find the manager of a Japanese hedge fund operating out of London or New York. One view expressed to the author was that the development of the hedge fund sector in Europe five years behind that of the US, and Asia five years behind Europe.

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See *Global Investor*, September 1999, page 20.

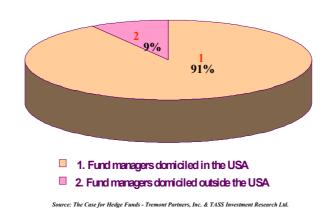
About one-third of hedge funds are US-domiciled. The rest are located in tax haven jurisdictions.

## **Domicile of hedge funds**



Source: The Case for Hedge Funds - Tremont Partners, Inc. & TASS Investment Research Ltd.

## Domicile of hedge fund managers



#### **Operations**

A hedge fund can be regarded as essentially the privatisation of the trading room of a large investment bank. Investment strategies that were previously pursued on a pooled basis within the investment bank are hived off and pursued on an isolated basis within individual hedge funds, thus becoming more visible. Technology now enables individual traders to conduct trading strategies that previously required the resources of a large firm.

Hedge funds vary greatly in size and investment style, such that there is no such thing as a "typical" hedge fund. However, many funds fit the following profile. A star performer, perhaps in his early 30s, from one of the blue chip investment banks tires of the bureaucracy in a large organisation and wishes to strike out on his own or with a partner. He gains capital backing from his former clients, or even from his former employer, and also puts his own money into the fund. He arranges one of the big investment banks to act as his fund's prime broker. This leaves the hedge fund manager free to concentrate on what he does best, trading the markets, and enables him to keep his overheads low. The fund size reaches a few tens of millions of US dollars. It may be described as a boutique operation. Appendix 2 gives the typical steps in starting up a hedge fund.

The prime broker provides the hedge fund with a centralised custodial, record-keeping, clearance and financing services for the markets in which the fund operates. It may also provide execution services, or trades may be routed to one or more executing brokers. The prime broker may also provide mid-office and back office support. As the term "prime" broker suggests, the hedge fund will usually have just a single broker in this role. Giant hedge fund LTCM had a single prime broker (Bear Sterns). Some larger hedge funds may engage more than one prime broker to diversify stock supply. Most major investment banks are in, or are seeking to be in, the prime brokerage business. It can be an attractive business because of the commission flow from the fund's active trading, the opportunity to leverage the investment bank's existing record-keeping and back office systems, and the opportunity, because of the fund's diverse investment strategies, to lay off risk arising from the investment bank's other transactions. Investment banks do not restrict their prime brokerage service to hedge funds but are increasingly serving a range of institutional investors.

In more detail, the prime broker offers the hedge fund services as follows:-

- **Custody**. The prime broker will act as global custodian for the hedge fund's securities. Although a few hedge funds will use a bank or trust company as global custodian, banks are less willing to provide margin finance or lend stock to the fund, so most hedge funds prefer the prime broker to perform this role. Such arrangement enables the fund to make maximum use of its securities as collateral for transactions.
- Clearing trades. The hedge fund may wish to use multiple executing brokers to enable it to access good execution and research. The prime broker minimises risk and operational effort for the fund by consolidating its dealings with execution brokers and providing consolidated trade and position reporting.
- Client service, to deal with issues arising from settlement in difficult markets, corporate actions, etc. The prime broker has to coordinate the delivery of services that may originate with different departments; it also has to serve a client (ie the hedge fund manager) who is accustomed to working within, and supported by, a large organisation.
- **Financing**. The prime broker provides intraday credit to facilitate securities transactions and foreign exchange payments, and provides margin credit to finance securities purchases. The prime broker offers a uniquely flexible financing service, including the ability to provide large multicurrency facilities at short notice.
- Securities lending. The prime broker borrows securities from investment fund

managers on behalf of the hedge fund to support the fund's short positions (so enabling fund managers to avoid direct exposure to hedge funds. Usually the prime brokerage and securities lending functions within the securities firm will be separate, but they should coordinate closely to provide service to support the hedge fund in its short selling activities.

Critical factors governing a hedge fund's choice of prime broker would include, the broker's commitment to the business; its management of conflicts of interest that may arise on handling the hedge fund's trades alongside its own; its ability to coordinate the provision of diverse services; and its willingness to be a partner, for example, by helping the fund through start up and growth stages. A high level of technology is needed for the prime broker to interface with its counterparties, such as the executing brokers, and with the hedge fund, ideally on a "straight-through" basis.

#### Hedge fund investors

A 1996 survey found that 53% of hedge fund capital is provided by high net worth individuals; funds of funds, banks brokers and insurance companies providing 20%; and pension plans 14%<sup>12</sup>. Private investors are the most important source of investment money for hedge funds; they are attracted by the high absolute returns, and have the flexibility (unless constrained by domestic regulation) to make decisions quickly and invest in non-traditional vehicles. Hedge funds contact private investors directly, or via private banks or family offices. Among institutional investors, endowments and foundations are becoming a major source of investment in hedge funds. They are attracted by the low volatility and low correlation of hedge fund returns with those of traditional investments and of individual hedge funds with one another. One reason these endowments and foundations (at least in the US) are in the forefront of hedge fund investing is that their boards of directors and trustees often include individuals with personal experience of investing in hedge funds. However, more conservative institutional investors are also investing in hedge funds: in August 1999, the California Public Employees' Retirement Scheme (CALPERS) announced that it would allocate up to US\$11 billion to alternative investments<sup>13</sup>.

Most hedge funds wish to attract investment from major institutions as well as private clients. From the investor's perspective, there are clear risks in investing in a small operation with little track record which is heavily dependent on one or two principals. It makes sense for the investor to diversify exposure to hedge funds<sup>14</sup>. For larger institutions that do not have the time to perform detailed assessments of the many individual funds, there are numerous intermediating firms that either advise an investor on the selection of funds for a portfolio, or structure funds of funds for such investors.

In terms of the location of investors, the US is the leading source, followed by Europe. In

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<sup>12</sup> Evaluation Associates Capital Markets

Calpers will expand investment options, put money in hedge funds, Dow Jones, 31 August 1999. See also *Growing up*, Economist, 20 November 1999.

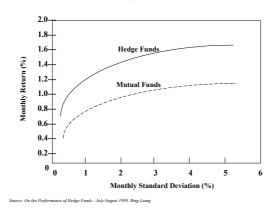
One private investor, presenting at the May 1999 AIC Hedge Fund conference, had monies with over 50 funds, and selected these funds for their ability, based on track record, to contribute to return while reducing the risk of his portfolio as a whole.

Asia, most interest is retail, including smaller subscriptions into publicly-authorised funds. One group claimed to have raised US\$430 million from Asian retail investors in 1998<sup>15</sup>. Asian institutional investors, including those in Hong Kong, have been slow to consider hedge funds because of negative perceptions about them, inability to understand the risks involved, administrative or regulatory constraints, cumbersome decision-making processes and lack of leadership from consulting and actuarial firms<sup>16</sup>. Because of regulatory constraints, retail investors usually cannot access hedge funds. However, a few funds have been designed for the retail investor.

#### Hedge fund performance

Notwithstanding the claim of the hedge fund sector to offer superior risk-adjusted performance compared with traditional funds, there are not many studies of hedge fund performance<sup>17</sup>. Difficulties in conducting empirical study of hedge funds include the diversity of the sector, and the difficulty in obtaining comprehensive data (see section 2.2 above). One study<sup>18</sup> comparing mutual fund and hedge fund performance finds that the efficient frontier for hedge funds is superior to that of mutual funds for all feasible standard deviations, even before taking account of mutual fund loads.

#### **EFFICIENT FRONTIERS, 1992-96**



The study also finds that hedge fund returns have relatively low correlation with traditional asset classes, and therefore provide diversification opportunities. And on a risk-adjusted basis, the average hedge fund outperformed the average mutual fund during the period covered (the five years to December 1996).

Another study<sup>19</sup>, covering a similar period and examining the risk and return of a wide range of classes of investment, finds that adding incremental amounts of an alternative investment index (ie hedge fund and managed futures returns) to an existing stock and bond portfolio would have considerably improved portfolio performance during the period. The study

Man Investment Products, presentation at AIC Conference in Hong Kong, 19 May 1999.

Man Investment Products, 19 May 1999 presentation.

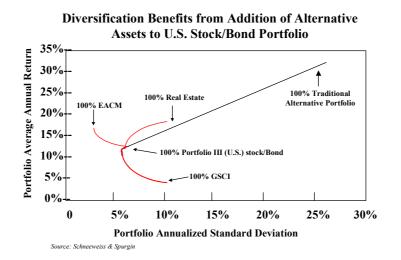
Bing Liang, page 73, who as at mid-1999 quotes only three studies.

Bing Liang.

Alternative Investments in the Institutional Portfolio, Schneeweis and Spurgin, September 1998.

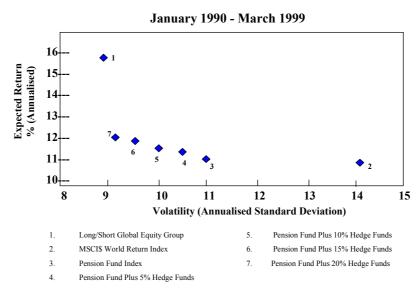
concludes that an allocation of 10 to 20% of such a portfolio to alternative investments may be deemed appropriate.

#### IMPROVING THE EFFICIENT FRONTIER



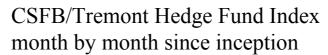
Another study by Tremont/Tass had a similar finding.

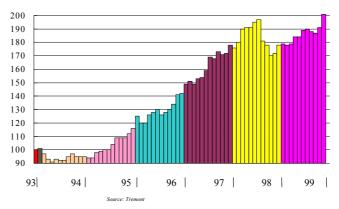
#### PENSION FUND INDICES & LONG/SHORT GLOBAL EQUITY GROUP



Source: The Case For Hedge Funds - Tremont Partners, Inc. & TASS Investment Research Ltd., 1999

However, some hedge funds are much larger than others; therefore the performance of the average fund does not necessarily reflect the performance of the average dollar invested in the sector. A value-weighted index of hedge funds substantially underperformed, and was more volatile than, the S&P 500 over the period 1993-99 <sup>20</sup> – although most of the underperformance came after mid-1998, ie the LTCM crisis, when some big funds were forced by investor withdrawals to sell assets at unfavourable prices.





#### 3. REGULATION OF HEDGE FUNDS

#### 3.1 General

While most hedge funds are essentially unregulated in the direct sense, they operate in financial markets that tend to be quite heavily regulated. Hedge funds tend to be constrained by regulation of the following types.

- Investor protection regulations seek to ensure that securities offered to the general public are accompanied by sufficient information for investors to form a judgement about the securities. In addition, in many jurisdictions publicly-offered securities are subject to restrictions on the investment strategies, the administration of the fund, etc. To avoid these restrictions most hedge funds are marketed only to small numbers of private individuals.
- Market integrity regulations are designed to ensure that individual participants do not dominate or manipulate markets. There are significant large position reporting mechanisms in various markets in the US. The UK has similar although less comprehensive regulations.
- Systemic risk management measures seek to protect the financial system against imprudent extensions of credit. The mechanisms govern financial intermediaries and

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Growing up, Economist, 20 November 1999.

involve margin requirements, collateral requirements, and limits on exposure to individual counterparties.

In addition, hedge funds like other investors are subject to criminal regulations such as those governing fraud, and to general securities regulations governing disclosure of securities interests, insider dealing, takeovers, etc. Further, the managers themselves may be registered with the respective authorities and subject to the regulations governing such registration.

Some commentators have felt that this indirect regulatory coverage is not sufficient and have argued for tighter measures - see sections 4 and 5 below.

#### 3.2 US

Public mutual funds governed by the 1940 Investment Company Act are subject to detailed regulations designed to protect the unsophisticated retail investor. These regulations include capital structure requirements, limits on borrowing, strict record-keeping and reporting. An investment company becomes subject to this regime if it has 100 or more investors. Hedge funds, accordingly, tend to keep below this limit, utilising the exemption in section 3c(1) of the act, which applies among others to individual investors with a net worth of US\$1 million or annual income of US\$200,000. The 1996 National Markets Improvement Act permits hedge funds to have unlimited numbers of partners provided each partner is a "qualified purchaser" with at least US\$5 million in total invested assets. Market practice is to limit the number of such investors to 500. The full provisions are quite detailed<sup>21</sup>.

Most hedge funds are structured as limited partnerships, with one or two general partners who are also the investment managers. The 1940 Investment Company Act requires funds with performance-based remuneration to accept only "qualified investors", defined as persons with net worth of US\$1 million or more.

The sponsors of hedge funds that trade on organised futures exchanges and have US investors are typically required to register with the Commodity Futures Trading Commission (CTFC) as commodity pool operators (CPOs). Registered CPOs are subject to periodic reporting, record-keeping and disclosure requirements.

Hedge funds are subject to the reporting system for large currency positions administered by the Federal Reserve System on behalf of the Treasury Department. Positions must be filed weekly and monthly throughout the year in each of five currencies: sterling, Canadian dollar, deutsche mark, Swiss franc, yen, by participants with more than US\$50 billion in foreign exchange positions. Participants with more than US\$1 billion are required to report quarterly. The Treasury has the power to request position information from participants in to-be-issued and recently issued securities to prevent squeezes. Options and futures exchanges generally have large open position reporting requirements in respect of trades in their markets. Institutional investment managers holding more than US\$100 million of listed or NASDAQ-quoted securities are required to report their holdings quarterly to the SEC. The CTFC requires reporting of all futures positions above certain thresholds.

For a fuller summary, see *Warburg*, page 29-31.

#### 3.3 UK

Hedge fund managers will usually seek authorisation as investment managers under the 1986 Financial Services Act by the Investment Management Regulatory Organisation (IMRO, now part of the Financial Services Authority). Most hedge fund managers will also qualify as investment firms under the European Investment Services Directive.

Key individuals within the firm will also need to be registered. In order to be registered, individuals will have to show that they are fit and proper for the registerable activity to be conducted, eg by passing exams.

The firm will need to meet capital requirements. For a hedge fund which does not propose to hold client assets or trade on its own account, the minimum is e50,000. The firm will also need to maintain liquid capital equivalent to one-quarter of one year's expenditure. Audited annual accounts and unaudited quarterly returns need to be submitted to IMRO. There are also conduct of business rules governing cold calling, advertisements, knowing the customer, disclosure (to the customer) of material interests and required steps to ensure suitability of recommendations.

The most common vehicle for hedge funds is a limited liability company issuing shares. The company is usually incorporated in an offshore jurisdiction such as the Cayman Islands or British Virgin Islands. The structure will usually be open-ended.

There are transaction reporting requirements on futures and commodity exchanges. Market makers in government bonds are required to report daily to the Bank of England on their positions.

#### 3.4 Hong Kong

The regulatory regime for hedge funds is somewhat similar to that of the UK. Most hedge funds sold to Hong Kong investors will be distributed on a private basis. In this case the fund does not need authorisation. If a person (the hedge fund manager or a distributor) wishes to market the fund to retail investors in Hong Kong he must obtain authorisation for the fund from the Securities and Futures Commission (SFC). Authorisation may be on the basis of chapter 7 of the Code on Unit Trusts and Mutual Funds for an equity or bond fund, or Chapter 8 for a more specialised fund. If the fund is based and managed outside Hong Kong the fund manager need not obtain a license in Hong Kong. However, in deciding whether to authorise the fund, the SFC will take into account the qualifications and experience of the fund manager and the location in which he is based, and will normally only authorise funds based in jurisdictions such as the US or the UK with which it has cooperation agreements with the regulators. On an ongoing basis, all advertisements for authorised funds have to be preapproved by the SFC.

The hedge fund manager itself may be registered as an investment adviser.

#### 4. ROLE OF HEDGE FUNDS IN FINANCIAL CRISES

There have been a number of financial crises in recent years in which hedge funds are suspected to have played a role. This section, based mainly on IMF reports, considers the evidence of such role, in so far as it is available.

#### 1992 ERM crisis

During 1987-1991 there was a flow of capital into high-yielding ERM currencies in what was known as a "convergence play". Hedge funds participated in this inflow. Then pressures began to mount on some of the ERM members, and it appeared that some of the exchange rate parities, especially those of sterling, were unsustainable. Hedge funds were among those taking short positions. One well-known macro fund (managed by George Soros) is understood to have funded a US\$10 billion short position in sterling, although it appears that other macro funds did not use leverage to the same extent. The IMF concluded<sup>22</sup> that the actions of hedge funds in 1992 to position themselves favourably for devaluation served as a signal to other fund managers to re-examine their own positions. But other financial institutions provided the real financial muscle. However, there is no hard data on the positions hedge funds actually acquired.

#### 1994 Bond market turbulence

Among other players, hedge funds were viewed as playing a significant role in the bond market movements of 1994. Hedge funds led other investors into European bonds in the second half of 1993 in the belief that European interest rates would fall. However, these expectations were disappointed by the two 25-basis point rises in US interest rates in February and March 1994 and by the stabilisation of Japanese and German interest rates. Accordingly, bond yields rose sharply as hedge funds and other investors tried to close out long positions. Hedge funds as a group made large losses on these transactions<sup>23</sup>.

#### 1994-5 Mexican crisis

Hedge funds played a limited role in this crisis. The conclusion of studies by the IMF and others was that domestic residents rather than international investors played the leading role. Domestic residents were considered to have had superior information about their economy. Hedge funds (and proprietory traders) were prevented from borrowing domestic currency from domestic banks and selling it forward by moral suasion on those banks and restrictions on capital account convertibility.

#### 1997 Asian financial crisis

The process leading to the crisis developed over a number of years. Several East Asian economies pegged their exchange rates to the US dollar, while issuing debt that offered higher yields than US interest rates. International investors, including hedge funds, found it

<sup>22</sup> IMF 1993 Capital Markets Report, page 11.

<sup>23</sup> HFFMD, page 16.

attractive to borrow in low-cost currencies to buy high yielding Asian fixed income securities, the so-called "carry trade". Following the collapse of Bangkok Bank of Commerce in July 1996 and the weak fiscal and export performance reported by the Thai authorities in January 1997, international investors involved in the carry trade began closing out their positions. Then interest rates rose in Japan and Germany, and the dollar rose against the yen and the pressure on the baht intensified, both as a result of withdrawals of long positions and the taking of short positions. Of the US\$28 billion forward book held by the Bank of Thailand at the end of July 1997, some US\$7 billion is thought to have represented transactions directly with hedge funds; hedge funds may also have used intermediaries to sell short baht. However, the bulk of the hedge funds' forward sales to the Bank of Thailand appear to have taken place in May 1997, ie near the tail end of the process. Thus hedge funds appear to have been at the rear, rather than at the front, of the herd<sup>24</sup>. After 2 July 1997, domestic corporates with unhedged positions rushed to cover their exposure, thus increasing the pressure on the baht. The role played by domestic corporations appears to have been larger than that played by hedge funds.

Hedge funds appear not to have taken out significant positions against other currencies. Market participants indicate that the main parties taking out short positions against the Indonesian, Malaysian and Philippine currencies were commercial and investment banks and domestic investors. These parties were better able to short because of their superior access to the market and to domestic credit.

Hedge fund managers did not fare well in the crisis of summer 1997, apparently awaking late to the baht crisis and being largely taken by surprise at the contagion on other regional currencies. Van estimates that offshore hedge funds lost 7% of their value in August 1997, due largely to the declines in emerging stock markets.

One academic study<sup>25</sup> decomposes the returns of the larger hedge funds involved in global currency trades (including three funds managed by Soros) in order to detect correlations between those returns and returns on the ringgit and other Asian currencies. The findings suggest little evidence that the fund managers as a group caused the currency crash. In fact, the performance of Soros's three funds was poor during the period in question. If anything, the top ten funds were buying into the ringgit as it fell in late summer and early autumn of 1997.

#### Hong Kong: August 1998

Rumours of hedge funds actively playing the stock and futures markets were circulating during 1997, especially during the period of extreme market volatility in October 1997. These rumours were investigated by the SFC and found to be without foundation. The Financial Services Bureau published a report based on the SFC's work in April 1998<sup>26</sup>.

<sup>&</sup>lt;sup>24</sup> *HFFMD*, page 18.

Hedge Funds and the Asian Financial Crisis of 1997, Brown, Goetzmann and Park, January 1998
"...although widely reported in the press that some speculators operated simultaneously in the foreign exchange market and the Hang Seng Index futures market, there was no clear evidence of such coordinated and concerted effort on the occasion of the October [1997] currency attack.", Report on

However, in a subsequent crisis, the Hong Kong Government took a different view. Between 14 and 28 August 1998 the Hong Kong Monetary Authority bought a total of HK\$118 billion of stocks and Hang Seng Index futures, the stocks representing some 7% of the market capitalisation and 20 to 35% of the free float. Without citing specific evidence, the authorities explained that the market intervention was targeted at a specific group of speculators, including hedge funds, who were allegedly manipulating Hong Kong stock and currency markets for profit through a so-called "double play". The double play was considered to involve sales of Hong Kong dollars to drive up interest rates and so depress share prices, enabling profits to be made on previously-established short positions. The authorities claimed that certain players were also spreading negative rumours to exacerbate the selling pressure.

Although the HSI rose 18% during the intervention, it fell back 10% in the two days following. Subsequently, the index rose again alongside other regional markets and the US market. International investors (possibly including the alleged speculators) were hit by the Russian ruble devaluation and LTCM crisis the following month. The IMF is somewhat sceptical of the alleged double play, citing the risks such a strategy would involve<sup>27</sup>. In the event, the market rose substantially in the months following the intervention, but this may be at least partly due to unrelated factors. It is therefore difficult to evaluate the effectiveness of the intervention. However, the Hong Kong dollar's link to the US dollar was maintained. The Hong Kong authorities also adopted a policy of transparency by revealing the stock holdings acquired during the intervention, and commenced disposing of them through the vehicle of the Tracker Fund in November 1999, thus containing the impact on Hong Kong's open market reputation.

Concern about hedge funds continues to be high on the Hong Kong Government's policy agenda. At a speech to the Confederation of British Industry in November 1999, the Financial Secretary warned that hedge funds continued to pose a threat to the international financial system<sup>28</sup>.

#### 5. LTCM AND REGULATORY RESPONSES

#### 5.1 Near-collapse of LTCM

Long Term Capital Management, a hedge fund constituted as a limited partnership, was founded in 1994, and included Nobel prize-winner Myron Scholes among its principals. LTCM was a large hedge fund with a capital base that peaked at US\$6.5 billion, reducing in 1997 to US\$4.8 billion. Eighty per cent of LTCM's positions were in G-7 bonds, but it also had exposures on futures exchanges, foreign exchange markets and OTC derivatives markets. On 31 August 1998, LTCM's balance sheet comprised US\$125 billion of assets, representing leverage of more than 25 times. Some of these assets represented margin deposits on derivatives contracts, and the notional value of the derivative open positions exceeded

*Financial Market Review*, Financial Services Bureau, April 1998, section 3.22 (see also sections 4.104 – 4.116).

<sup>&</sup>lt;sup>27</sup> 1999 Capital Market Report, page 173.

Tsang urges more checks on hedge fund activities, SCMP, 3 November 1999.

US\$1,300 billion. In a few cases, individual positions exceeded 10% of gross open interest on the respective futures exchanges. Although LTCM was diversified in the sense that its assets were spread across a large number of markets, its strategy was rather concentrated on convergence trades. It was therefore highly vulnerable to factors upsetting the expected convergence patterns. Such shock came from Russia's devaluation of the ruble and declaration of a debt moratorium on 17 August 1998. There was a global flight to quality that affected almost all world markets simultaneously, widening spreads and reducing liquidity.

By the end of August 1998, LTCM's capital base had been reduced to US\$2.3 billion, and it sought fresh capital. At the same time, creditors demanded more margin. By 23 September 1998, default was expected, and it was feared that this would seriously impact world financial markets at a particularly sensitive time. Under the auspices of the Federal Reserve Bank of New York, 14 securities firms that were exposed to LTCM agreed to form a consortium to inject US\$3.6 billion into the firm in return for a 90% stake in the equity. With this injection LTCM was able to meet its obligations and collapse was averted. It appears that the solvency of the major securities firms that had exposures to LTCM would not have been threatened if they had had to liquidate their positions suddenly<sup>29</sup>. Nonetheless, the crisis, and the spectre of a major impact on the world financial system resulting from the activities of a single institution led to worldwide concern, prompting regulators and governments to consider ways to strengthen the system. The hedge fund sector entered a more difficult operating phase as counterparties became more stringent in offering credit and some investors withdrew capital.

### 5.2 Regulatory responses and voluntary industry initiatives

The LTCM fiasco, coming as it did near the low point of the Asian and emerging market financial crisis, attracted the attention of many national and supranational regulatory bodies. Numerous reports were issued and recommendations made for improvement in national and global financial systems. The more significant views are summarised below. However, it seems that all of this debate has not generated much that is new. There seems to be consensus only on more disclosure by very large HLIs and on tight credit controls by intermediaries. These measures represent only incremental changes. Large position reporting is already a feature of some regulatory regimes, and all financial intermediaries are subject to prudential controls – and in their own business interests should follow proper credit policies. Calls for direct regulation of hedge funds foundered on difficulties of definition and did not attract widespread support. Some of the reports lack research and repeat unsupported claims of other commentators. The hopes of some politicians for a "new financial architecture" have not so far been met.

The views of various regulatory institutions are summarised in Appendix 2.

Industry groups such as the Counterparty Risk Management Policy Group also responded to the LTCM crisis by developing and advocating improved procedures for their members. The main initiatives are summarised in Appendix 3.

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<sup>&</sup>lt;sup>29</sup> *RPWG*, page B-7.

#### 6. ISSUES

#### 6.1 Divergence of views

Although the views of regulators on hedge funds as summarised in Appendix 2 are diverse, there is a degree of consensus among regulators on the following points:-

- Hedge funds (among other HLIs) pose problems for financial system stability and market integrity.
- Action should be taken to address these problems at the regulated intermediary, ie counterparty, level.
- Action should also be taken at the hedge fund level by encouraging or requiring fuller disclosure by the funds directly.

The views of market practitioners including hedge fund managers and prime brokers, tend to differ from this. Although it would be more difficult to speak of a consensus among these diverse parties, certain viewpoints tend to be expressed strongly and frequently.

- The business prospect for the hedge fund sector is good; long term growth in investor demand is expected.
- The systemic concerns expressed by regulators do not relate to hedge funds, or relate only to a few renegade operators.
- Any such concerns can be met by incremental improvements to current regulatory procedures.
- In any case, investors and counterparties are scrutinising hedge funds more closely and forcing improvements in procedures and transparency anyway. Market forces will drive improvement and clean-up of the sector.

There is thus a divergence of view between the industry and the regulators. This is perhaps to some extent to be expected – both groups have their own interests. However, the distance between the two groups is quite large. Also, it seems that the hedge funds have let the regulators set the policy agenda, which may not be in the long term public interest. Ideally, there would be a reconciliation of the two viewpoints so that a rational solution to concerns could be adopted. The rest of this section attempts such a reconciliation.

The proposed reconciliation has the following elements:-

- (a) On the one hand, it is suggested that the case made by the regulators is incomplete;
- (b) And on the other hand, the hedge fund industry is not very mature; hence,
- (c) Neither side has got to grips very well with the other's concerns.

As regards (b), the immaturity of the hedge fund sector, this is dealt with in section 6 below, on future developments. Essentially, despite its recent growth, the sector is still at the periphery of the investment community in terms of acceptability. There are some maverick operators, there is unwarranted secrecy, some practices are questionable, the data available on the industry is not very complete or accurate, the question of interaction with the regulators

has not yet been resolved. The industry lacks high profile advocates. The hedge fund sector thus has not been able to articulate its case very well in the current debate, and the policy agenda has been dictated by the regulators. However, the regulators appear to have a limited understanding and perspective, as is argued below.

#### (1) Hedge funds pose a challenge to the status quo

It is argued elsewhere in this paper that the hedge fund value proposition is essentially a rational and attractive one. The archetypal hedge fund concepts of absolute return; of an investment strategy that is not restricted to long-only positions but can employ shorting, leverage and derivatives; and of a manager committing his own money alongside that of his clients, appear sound in principle. For many investors, this value proposition will be more attractive than that of the traditional mutual fund. Further, because of the low correlation of hedge fund returns to those of asset markets, even for the investor who has a core traditional long-only portfolio, hedge funds offer useful diversification. These in-principle advantages are given some support by academic research findings. Hedge funds thus represent an important *market innovation* that has considerable merit.

The various regulators whose views are summarised in Appendix 2 in general do not pay much attention to the merit of hedge funds. Rather, they focus on the potential negative systemic implications. This is, of course, their primary job. But even for a regulator, it is an insufficient response to an innovation merely to regard it as a threat. There is the risk that the regulatory response will be too repressive, thus potentially denying the public the benefits of the innovation. Or it may merely be ineffective as the reality of the market moves beyond the regulators' grasp. Perhaps worst of all would be the suggestion (by the Reserve Bank of Australia) that hedge funds should be subject to capital requirements and restrictions on investment strategy – in other words, forced to become like traditional mutual funds. This would indeed be an attempt to turn the clock back.

A more considered appraisal of hedge funds would perhaps (1) regard them not as a threat but as an innovation, and (2) acknowledge the attractiveness of the hedge fund value proposition; and (3) anticipate, given such attractiveness, that the hedge fund sector is likely to grow. A more optimal regulatory response could then be formulated in terms of maintaining regulatory objectives in a changed world that includes a significant and growing hedge fund sector. Seeking merely to restore the status quo may not be very helpful.

#### (2) Evidence of hedge funds' role in systemic crises is scanty

Hedge funds received much of the blame for the various monetary crises of recent years. However, as stated in section 3 above, the available evidence of their involvement is scanty. The IMF's study of some of these crises finds hedge fund involvement only in the 1992 ERM crisis – and even this finding appears to rest partly on the oral claims of one hedge fund manager which may not be entirely reliable. In the other crises, the available evidence points to other players, often the local corporates and institutions, as playing the major role. Academic research tends to support the IMF's findings.

These findings are not necessarily conclusive. An absence of evidence does not disprove the case against a hedge fund role. And it is granted that hedge fund conduct, for example, the

secrecy or, in certain cases, the boasting about success against errant governments, is at times unattractive.

Even if it were the case that hedge funds had no role in the various financial crisis of recent years, if it were felt that they could cause future crises, this could be a valid reason for the authorities taking regulatory action against them. However, to make the case for such a possibility, one would have to envisage scenarios that are feasible. Regulators have not always constructed scenarios very convincingly. As noted in section 3 above, the IMF query the feasibility of the "double play" allegedly adopted by hedge funds during the Hong Kong financial crisis of August 1998.

# (3) The systemic crises, whether caused by hedge funds or not, are not necessarily wholly "bad"

In the regulatory reports summarised in Appendix 2, it is taken as a given that systemic instability, for example the destabilising of country's currency, is a "bad" thing which regulators should try to prevent. Leaving aside the question of the part actually played by hedge funds in such destabilisation (discussed in (2) above), the foregoing proposition should not be accepted without further analysis. Some examples may illustrate the point.

- Few commentators would now defend the decision of the British authorities in 1991/92 to maintain the pound at its then parity with the deutsche mark under the ERM. In the event, the realignment of the pound at a lower level as a result of the speculative attacks against it coincided with the beginning of a period of strong growth for the British economy. With hindsight, it could be argued that the British Government was wrong and that the collapse of the pound was not a "bad" thing.
- A similar argument can be made in relation to the East Asian crisis of 1997/98. Few commentators would defend the policies of the Thai Government which involved encouraging Thai corporates to borrow US dollars to buy baht assets, and speculating in the forward market in an unsustainable manner. It was, in a sense, not a bad thing that these unwise policies were terminated.
- Or to take a counter example, a case where regulatory intervention did succeed in maintaining the status quo the case of LTCM. Was it a "good" thing that LTCM was rescued? The consensus among regulators seems to be, yes. But with hindsight, given the extreme continuing bullishness of the US markets, which some commentators have described as a bubble, it could be argued that a crisis at that time could have been helpful in deflating the bubble and perhaps averting a worse crisis that might still lie ahead. The intervention was also not without its costs to the reputation of the US authorities given that they were at that time trying to urge discipline on Asian Governments. And questions have been raised as to the motivation of the US authorities given their relationship with the principals of LTCM<sup>30</sup>.

Of course, it would be too simplistic to argue from these examples that HLIs are a force for good, and should therefore have unrestricted licence. But it would be equally wrong to seek

Fear more than friends behind the rescue, SCMP, 28 September 1998.

to protect governments who pursue unwise and contradictory policies from the consequences of their folly. The policy response to hedge funds needs to be more modulated and take account of the public interest at different levels.

#### (4) Concerns on hedge fund investment strategies may not be valid

Those voicing concerns about hedge funds have tended to find difficulty in being specific in their targets or in proposing specific measures to address their concerns. This may be because, due to the diversity within the hedge fund sector, it is unlikely that any concern would apply to the sector as a whole. Also, because other institutions conduct activities similar to those of hedge funds, any concerns that do apply to the activities of some hedge funds are likely to apply to the activities of a range of other institutions too.

Commonly voiced concerns are identified and discussed in the list below:-

#### Leverage

The key public policy issue identified by the President's Working Group on LTCM was how to constrain excessive leverage, and so prevent contagious collapse of "highly leveraged institutions". LTCM, a hedge fund, was highly leveraged, with assets at more than 25 times capital. Some commentators have therefore regarded the term "highly leveraged institution" as synonymous with "hedge fund".

However, the great majority of hedge funds operate with relatively modest levels of leverage, if indeed they use leverage at all. Van estimate that 70% of hedge funds use leverage, but only 16% borrow more than one dollar for every one dollar of capital<sup>31</sup>. Macro funds tend to use more leverage: Van estimate that 83% of macro funds use leverage and more than 30% of these borrow more than one dollar for every dollar of capital. A small proportion of these 30% would have much higher leverage than 1:1. But is it clear that LTCM, with its very high levels of leverage, was unusual and not representative of hedge funds as a class.

It should be born in mind that other classes of institution are much more highly leveraged than the "median" hedge fund. At year end 1998, the five largest US commercial bank holding companies had average leverage ratios of nearly 14:1 while the average leverage ratio of the five largest investment banks was  $27:1^{32}$ . Property companies may also be highly leveraged. Therefore the term "highly leveraged institution" would tend to catch only a small proportion of hedge funds but would catch all banks and quite a number of other institutions as well.

#### Risk

There is concern, prompted by LTCM, that (a) hedge funds engage in especially risky strategies and so (b) they increase the overall risk level of the financial system.

However, as regards (a) it is not true that hedge funds as a class engage in high risk strategies.

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Quoted in *HFFMD*, page 7.

<sup>32</sup> *RPWG*, page 29.

The risk of a hedge fund is dependent upon the investment strategy. Some strategies, such as security arbitrage, are of relatively low risk. Other strategies involve unleveraged long-only investment in securities perceived to be undervalued. Under such a strategy, provided the fund has secured long term capital from its investors (eg by limiting withdrawals) there is virtually zero risk of such a fund defaulting. Some funds do engage in higher risk strategies. Since the aim of most hedge funds is to achieve an absolute return on a steady year-by-year if not month-by-month basis, they have incentives to be less volatile than traditional long-only funds.

The potential risk of hedge funds to the financial system (b) can be divided into a number of elements. Leverage is considered 6.1(1) above, predatory speculation in main section 4 above. A further source of risk is *concentration*, or lack of diversification. Considering the relevant levels in turn,

- At the *hedge fund level*, LTCM, although diversified in terms of markets, was not strategically diversified. Regulated funds are often subject to rules requiring certain kinds of diversification, eg limits on exposure to a single security, but not necessarily covering diversification of markets, nor diversification of strategy. Thus, LTCM was better diversified than most traditional regulated funds in that its holdings were allocated across many securities and additionally, unlike many traditional funds, also across many markets. Although LTCM was not strategically diversified, nor are many traditional funds eg a typical traditional regulated fund strategy is long-only exposure to a single market. LTCM had exposures that were a significant proportion of the total outstanding securities, but this is also true of many traditional investors. It is therefore suggested that concentration per se at the hedge fund level is a matter that can be left to the hedge fund manager who will have to justify his strategy to his investors.
- At the *counterparty level*, ie the level of brokers and prime brokers, LTCM's counterparties had taken overconcentrated exposure to it. It is suggested that this is a matter that can give rise to systemic implications, but is problem common to all forms of credit-giving, not just hedge funds. Since the counterparties are all regulated entities, the problem of overconcentration of counterparty exposure can be managed by setting regulatory limits on such exposure, as is common banking regulatory practice.
- Overconcentration at the *investor level* is also possible. Where the investors are themselves regulated funds, this can be dealt with through the regulations governing such funds, and provisions against overconcentration of investments are commonly found in such regulations. Where the investors are private institutions or individuals, it would appear a matter for their individual choice. A wise approach to investment in hedge funds is to diversify one's exposure by investing in a portfolio of them with different styles, or in a diversified fund of funds. However, this would appear a matter to be left to the investor rather than one to be imposed by regulation.

LTCM collapsed in conditions which were extreme; liquidity in many markets had dried up and attempts to realise funds by selling collateral would have exacerbated the situation not only for LTCM but for other market participants. As RPWG notes, this raises the issue of how events that are assumed to be extreme and very improbable should be incorporated into

risk-management and business practice, and how they should be dealt with by public policy<sup>33</sup>. This issue is not restricted to hedge funds. It is not a simple issue. For example, extreme conditions cannot be catered for simply by setting higher capital requirements since this will result in the waste of such capital for the long periods of normal market conditions, and in the rare event of catastrophe such additional capital will still not be sufficient. The answer may lie in more careful modelling of conditions in the extreme range, ie taking account of convergence of previously low-correlated markets, and drying up of liquidity, and/or some form of financial "catastrophe insurance".

#### **6.2** Economic value

Do hedge funds make an economic contribution? On the positive side, in principle, it would appear that because of their diversity of styles, hedge funds would tend to diversify the sources of demand and supply for securities in a market, and so contribute positively to liquidity and price formation. For example, arbitrage funds should contribute directly to improved price formation. Distressed securities funds and emerging markets funds should provide liquidity in areas where it might otherwise be lacking. Given the current trend for investment banks to consolidate and focus on larger customers, smaller more focused financing institutions like hedge funds can make an important contribution in special situations. Academic research shows that one of the main economic benefits of hedge funds is their ability to provide capital to relatively illiquid investment markets<sup>34</sup>.

On the negative side, it would appear that where funds engage in trend following or momentum trading, their participation would tend to exacerbate the trend or the momentum, to the detriment of price formation. However, this criticism can also be made of traditional long-only funds, since these, whether actively or passively managed, tend to track the performance of an index and so amplify its swings. In fact, hedge funds, which have very diverse strategies, will have less negative impact in this respect than long-only funds, which all tend to track the performance of the same few indices. So, for example, a mutual fund which has invested in assets which appreciate may attract more inflows of capital from investors and be bound by its prospectus to invest that capital in the recently appreciated assets, pushing its price up further. Conversely, a mutual fund may be forced to liquidate declining positions for similar reasons, thus pushing declining asset prices down further. A hedge fund normally has more flexibility in its mandate, and investors who are locked in for longer periods, so it would be less inclined than the typical mutual fund to "positive feedback" strategies of this kind.

#### 6.3 Transparency

In the discussion of ways to regulate or control the activities of hedge funds, there have been widespread calls for hedge funds to be made more transparent, for example by establishing requirements for them to report their strategies and positions. The example of LTCM, which as the President's Working Group report states "stood out [among hedge funds] for its

<sup>&</sup>lt;sup>33</sup> *RPWG*, page 16.

Ackerman, C. "The Impact of Regulatory Restrictions on Fund Performance: A Comparative Study of Hedge Funds and Mutual Funds", FMA presentation, October 1998, quoted by Schneeweis.

opaqueness and low degree of external monitoring"<sup>35</sup>, lends support to these calls.

Such calls raise a number of questions. There is firstly the difficulty of defining hedge funds, ie the class of entity to whom such regulation would apply. Secondly, there is the question of fairness vis a vis other classes of investor. Large institutional funds and the trading desks of investment banks, which are generally much larger and so would tend to affect markets as much if not more than hedge funds, currently do not report their strategies at all, and if they report their positions, in many cases do so only in aggregate form and after significant delay. Thirdly, hedge funds are typically constituted as private partnerships. Should private investors be compelled to report their activities, and if so, why just hedge funds and not other kinds of large private investor?

An alternative to requiring disclosure by a given class of participant – ie HLIs or hedge funds however defined – might be to require disclosure by all participants of positions of a given size or significance. The existing US requirements for large position reporting might be a starting point, and could be integrated and extended if necessary.

#### International Centralised Credit Database

One proposal put forward in the wake of the LTCM crisis, which the Counterparty Risk Management Policy Group intends to address, is an international centralised database on the credit exposure of hedge funds as reported by their counterparties, the banks and broker-dealers. The concept is similar to that of the credit bureau to which a mortgage lender might refer before deciding whether to extend credit to a borrower. However, there are a number of difficulties in such a concept. For example, reported exposures would not be very meaningful without information on collateralisation and hedging, but such information would be complex and difficult to standardise; hedge funds change their positions rapidly, thus such a register would be laborious to maintain.

#### 7. POSSIBLE FUTURE DEVELOPMENTS

This section sets out some possible future developments for the hedge fund sector.

#### Growth

It has been argued in this paper that the basic hedge fund value proposition – absolute return, freer investment strategies and performance-based fees – is a rational one which is attractive to many investors.

While most institutions remain wedded to the long-only concept as their mainstream investment strategy for the time being, it is widely accepted in Europe and North America, at least, that the allocation of a proportion of the total portfolio to alternative investments, including hedge funds, can contribute to returns while lowering overall risk. Thus, hedge funds are regarded as a useful supplement to a long-only core portfolio, and are likely to

<sup>&</sup>lt;sup>35</sup> *RPWG*, page 14.

attract monies from mainstream investment houses.

Notwithstanding the reverses and negative publicity the sector has experienced recently, it is still growing rapidly. Confidence in the long term future of the sector is shown by the way in which traditional investment houses, such as HSBC, are establishing their own hedge funds.

#### Retail funds

If the argument is accepted that hedge funds, either individually or collectively in the form of funds of funds, can offer less volatile returns than traditional long-only funds, then it would seem rational to permit retail investors to participate in such funds. Some broadening of the restrictions on funds that may be offered to the public may therefore be expected. There has already been some movement in this direction in jurisdictions such as the US and Hong Kong.

#### Maturation

Although hedge funds as an investment class are in fact half a century old, the rapid growth of the sector during the 1990s means that they may almost be considered a new industry. Like other newly emerging industries, the hedge fund sector exhibits characteristics that appear likely to be modified as the industry matures.

- Remuneration. This may be excessive at current levels. A twenty per cent of profits (and no share in losses) together with a one or two per cent annual management fee may not be a sustainable level of remuneration for hedge fund managers in the longer term.
- Professionalisation. The typical hedge fund, a one-man boutique-type operation, often has difficulty in convincing big institutional clients that it is a worthy long term strategic partner. Intermediaries fill the gap to some extent by evaluating individual hedge funds in depth and then advising the institutions or structuring funds of funds for them to invest in. However, there may be a trend to the emergence of larger more professionally-managed funds that can talk with the big institutional investors on more equal terms.
- Industry association. In the wake of recent negative publicity, the sector as a whole clearly needs spokesmen for its cause. In the longer term, there will be a need for more formal structures, such as accreditation programmes specific to the sector. There is an industry association: the Alternative Investment Management Association: perhaps this will need to raise its profile, or others may arise. One difficulty is the diversity of the sector; a single institution may not be able adequately to represent the sector as a whole.
- Sector information. As noted in above, comprehensive data on the sector is lacking, partly because of difficulty in defining the sector, and partly because of the secretiveness of the industry and the small scale of many funds. In November 1999, Tremont Advisers launched the first value-weighted hedge fund index, with nine subindices<sup>36</sup>. Further developments to improve the quality and comprehensiveness of the information available on hedge funds are to be expected.

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Growing up, Economist, 20 November 1999.

#### Convergence

Over the longer term, there may be pressure on traditional funds to loosen their investment mandates, ie pressures to lower cost and enhance performance may drive such liberalisation. The hedge fund story, of strategic diversification and absolute return, is potentially an attractive one to many investors, hence traditional fund houses are starting to offer hedge fund-related products, including some packaged for retail investors<sup>37</sup>. If these developments continue, there could be a convergence between the traditional fund sector and hedge funds.

#### Asia

The development of the hedge fund sector in Asia is likely to be slower than in Europe and North America because of the conservatism of investment institutions and negative attitudes on the part of government. Demand from private clients may provide the main driver for the sector. Further difficulties in the Asian markets are the relatively small size and illiquidity of some markets, and the lack of facilities for short-selling, derivatives trading and stock borrowing and lending. Currency restrictions in some markets are a further handicap. Hong Kong scores well on these counts relative to other Asian markets – see section 8 below. The way forward is for these markets to permit short selling and stock borrowing and lending, which most of them are now doing.

#### 8. TENTATIVE POLICY RECOMMENDATIONS FOR HONG KONG

Hong Kong is a relatively large and liquid market in the ex-Japan Asian region, the most open to foreign participation, the best-provided with derivatives and short-selling, and on the whole the most liberal. It is therefore probably the most accessible market in the region for hedge funds to invest in.

As a base to operate of a hedge fund, on the whole Hong Kong is probably the most attractive – in terms of taxation, support services, and the lightness and predictability of regulation - just as it is for fund management generally. The rhetoric from Hong Kong regulators, and certain instances of ostracism of hedge funds<sup>38</sup>, has been a negative factor, but the practical effects of this have not been too great, and in a sense the Government's bark has been worse than its bite<sup>39</sup>. The Singapore Government has made positive statements of encouragement for hedge funds setting up in the island state, but in terms of substantive attractions, Hong Kong probably has the edge for the time being. Nonetheless, the number of hedge funds based in either jurisdiction is very few, and of those that are based in Hong Kong, some are merely the investment arms of funds based overseas, and do not serve local customers. At the same time, it is understood that significant money from high net worth individuals in Hong Kong is channelled to US-based hedge funds. If this is true, there may be an opportunity for more

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The new look: hedge funds in mutual fund clothing, AWSJ, August 1999. See also Mutual Funds Gaining Hedge-Fund Qualities, Dow Jones Business News, 22 December 1999.

As reported, for example, in *Tracker freezes out hedge funds*, SCMP 10 November 1999.

One hedge fund adviser suggested to the author that the Hong Kong authorities were perfectly aware that hedge funds did not pose a significant threat to the system, but criticised hedge funds anyway because it was politically popular to do so.

Hong Kong-originating money to be managed locally.

The Hong Kong policy framework would benefit from the following:-

Better understanding of the actual nature of hedge funds. The concerns expressed by the Hong Kong authorities apply, to the extent that they apply at all, to only a small proportion of the total population of hedge funds, and they probably apply as much if not more to other financial institutions, such as investment bank trading desks. Such concerns, to the extent that they are valid, should be dealt with through more targeted strategies, such as improvement of market manipulation regulation, rather than by attacking an entire sector. Proper recognition is needed of the positive contribution hedge funds can make to a market, in terms of diversifying demand, improving price formation, and providing liquidity. And there needs to be recognition of the essential rationality of the hedge fund strategy – of absolute rather than relative returns – and of its value in adding to investor choice. In terms of human resources, hedge fund managers are among the best and brightest of their profession, and, if attracted to Hong Kong in significant numbers, would make a contribution to the knowledge economy.

**Recognition of the likely growth in the sector**. The global hedge fund industry appears to be growing strongly. This paper suggests that there are good prospects for this growth to continue. In such a scenario, the proper question for the Hong Kong authorities would be, how should the policy framework respond to and benefit from this development? If, as argued here, alternative investment represents the future, does Hong Kong want to be part of that future? At present, this does not appear to be on the authorities' agenda.

**Market improvements**. The following would be helpful to the development of the hedge fund industry in Hong Kong, and would be generally beneficial.

- Improvements in the regime governing stock borrowing and lending.
- Extension of the list of stocks able to be sold short.
- Reconsideration of the present restrictions on short selling, eg the tick rule and the requirement for the seller to have the right to deliver the stock before selling.
- Review of the taxation regime for funds in Hong Kong. Despite attention to mutual funds in the last few budgets, the taxability or otherwise of fund management operations remains unclear, and a source of concern to managers based in Hong Kong.
- General improvements in the professionalism of market practitioners. Regulators could contribute to this through such procedures as qualification-setting, recognition of qualifications, establishing codes of conduct, etc.

#### **CLASSIFICATION OF HEDGE FUNDS**

Funds are commonly characterised by their investment strategy. Set out below is the classification of 28 investment strategies identified by Hedge Fund Research in 1997. Some of these so-called strategies refer merely to the geographical area or sector in which the fund invests; others reflect conceptually different investment strategies. However, it should be born in mind that the following descriptions are somewhat loose and that hedge funds may adopt diverse strategies. Funds following a given strategy may adopt widely different approaches to the degree of leverage, extent of hedging, etc.

**Convertible arbitrage** usually involves purchasing a portfolio of convertible bonds and at the same time selling short the underlying stock. Leverage may be used, and interest rate exposure may also be hedged. The short sale of the stock reduces the exposure to default by the issuer of the bonds.

**Distressed securities** strategies involve the purchase, or short sale, of securities where the price is affected by distressed circumstances, such as insolvency or reorganisation.

**Emerging markets** strategies involve investment, usually long, in corporate or government securities of developing countries. Emerging markets funds are divided into Eastern Europe/Commonwealth of Independent States (ie former Soviet Union); Asia; Global; and Latin America.

**Equity Hedge** funds comprise a core holding of long equities hedged at all times by short sales of stocks and/or stock index options.

**Equity market neutral** funds seek to exploit market inefficiencies in the pricing of related securities, minimising exposure to market movements by combining long and short positions. For example, long positions may be built up in the strongest companies in several industries combined with corresponding short positions in the weakest companies. Another method is to invest long in stocks and short index futures.

**Equity non-hedge** funds invest long in equities, usually without a hedge, hence these funds are stock pickers. Some funds use leverage to enhance returns, and some funds may short stocks from time to time.

**Event-driven** strategies, also known as "corporate life cycle" investing, focus on major transactional events such as mergers, acquisitions, spinoffs, insolvencies, share buybacks, and recapitalisations. Some funds may specialise in Merger Arbitrage and Distressed Securities. The fund may long or short stocks, preferred stocks, debt and options, with or without leverage.

Fixed Income strategies may be subdivided into the following subcategories:-

• **Arbitrage** strategies seek to profit from price inefficiencies between related fixed income securities while neutralising exposure to interest rate risk. Types of hedging

trades include, yield curve arbitrage, corporate versus treasury yield spreads, and cash versus futures.

- **Convertible bond** funds invest long only in convertible bonds.
- **High yield** funds invest only in non-investment grade debt, with the objective of obtaining income or profiting from subsequent price increases. Emphasis is placed on assessing the credit risk of the issuer.
- Miscellaneous.
- **Mortgage-backed** funds seek to profit from security-specific mispricings of these instruments. There is often hedging of prepayment and interest rate risk. Leverage, futures and options and short sales may be used.
- **Total** funds are a composite of the other fixed income strategies.

**Macro** funds make leveraged bets on anticipated price movements of stock markets, interest rates, currency movements and commodity prices. Such funds take a global top-down approach and may invest in any markets using any instruments to gain exposure to the expected movements, including exchange-traded and OTC derivatives.

**Market Timing** strategies involve switching into investments that appear to be beginning an uptrend, and switching out of those beginning a downtrend. Money market funds and mutual funds are the instruments primarily used.

**Merger Arbitrage** (Risk Arbitrage) involves investment in event-driven situations such as leveraged buyouts, mergers and hostile takeovers. Often the stock of the acquiree company will increase while the stock of the acquiror decreases, accordingly the fund will purchase the acquiree and, perhaps, sell short the acquiror. Stock options may be used. Market risk is usually hedged by purchase of put options or put option spreads.

Relative Value Arbitrage seeks to take advantage of relative pricing discrepancies between instruments including equity, debt, options and futures. Mathematical, fundamental or technical analysis may be used to detect mispricing; leverage may be used and some funds invest globally. Techniques include dividend arbitrage, pairs trading, options arbitrage and yield curve trading.

Sector funds can be subdivided as follows:-

- Energy
- Financial
- Healthcare/Biotechnology
- Metals/Mining
- **Total**, ie funds investing in all sectors.
- Miscellaneous
- Real Estate
- Technology

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**Short Selling** involves the sale of securities not owned by the seller, for which stock borrowing is required.

**Fund of Funds** invest with multiple managers through funds or managed accounts. A diversified portfolio of managers is contructed, either managers within a single strategy or managers within different strategies with the objective of improving the risk/return ratio. The minimum investment amount may be lower than for individual hedge funds.

#### REGULATORY RESPONSES TO LTCM

#### **IMF**

The May 1998 report, the content of which is reflected in section 3, was initiated by IMF management in response to the Asian crisis which commenced in 1997 and in which hedge funds were perceived to have had a significant role. The report considers hedge funds as a whole, and traces their possible role through various other financial disturbances, such as the sterling ERM crisis of 1992, and the Mexican peso crisis of 1995. Generally the report's message is that the part played by hedge funds in the international financial system is smaller and less disruptive than popularly perceived.

Post-LTCM, the IMF was urged to update its report, but contented itself with mainly low key commentary on the debate.

#### Basle Committee on Banking Supervision

In January 1999, the committee issued a report and guidance on banks' interaction with highly leveraged institutions (HLIs), including hedge funds. The recommended practices include establishing clearing policies and practices for interacting with HLIs; employing sound information-gathering, due diligence and credit analysis procedures; and setting meaningful credit limits for dealings with HLIs. Although the committee considered the direct regulation of HLIs, it concluded that focusing on the bank counterparties of HLIs would be a quicker and more effective way of influencing HLIs' behaviour.

#### G-7 Finance Ministers and Central Bank Governors

The G-7 Finance Ministers and Central Bank Governors issued a statement of concern on HLIs and their activities in the world financial markets in February 1999. In March 1999 they established the Financial Stability Forum comprising finance officials from G-7 members together with representatives from Hong Kong, Singapore and Australia, to ensure better international cooperation to promote financial stability, improve the functioning of markets and reduce systemic risk. The forum established a working group on HLIs and another on offshore financial centres. In March 2000, the forum released a report calling for large highly-leveraged funds of more than US\$1 billion to adopt minimum disclosure standards and their own best practice guidelines. The report did not call for direct regulation of hedge funds. A separate working group (chaired by Hong Kong SFC Chairman Andrew Sheng) identified 12 international standards for strengthening financial systems. And a third working group on offshore financial centres concluded that such centres did have an adverse impact on global financial stability. The report recommended that the IMF be charged with carrying out independent assessments of offshore financial centres to encourage international standards of best practice.

#### Board of Governors of US Federal Reserve System

In February 1999, the Board issued a Supervisory Letter addressing the apparent weaknesses of counterparty risk management systems in large complex banking organisations. The letter covers assessment of counterparty creditworthiness, credit risk exposure measurement, use of credit enhancements and contractual covenants, and credit risk exposure limit setting and monitoring systems. Banks are to have specific policies for assessing the special risk profiles of hedge funds.

## US Office of the Comptroller of the Currency

In January 1999, the Office issued a bulletin containing risk management guidance on derivatives and other bank activities, highlighting existing weaknesses with financial institutions. According to the guidance, banks must understand the strengths and weaknesses of their risk management system, must stress test their risk outputs (eg value at risk), must conduct due diligence, must maintain the independence of risk oversight functions, and must have appropriate risk control mechanisms in place before entering new markets.

#### Report of the US President's Working Group on Financial Markets: April 1999

The President's Working Group, consisting of officials from the US Treasury, SEC, Federal Reserve and Commodity Futures Trading Commission, was commissioned to consider the policy implications of the LTCM failure. The main policy issue identified by the working group was how to constrain excessive leverage which, by transmission from one financial institution to another, can increase the likelihood of a general breakdown in financial markets. The report notes that the issue is not limited to hedge funds: other financial institutions are often larger and more highly leveraged than most hedge funds.

Noting that market discipline failed to constrain excessive leverage in the case of LTCM, the working group recommends the following measures:-

- More frequent and meaningful information on hedge funds should be made public. Those hedge funds that are currently registered as CPOs should report quarterly rather than (as at present) annually, and should include in their reports more comprehensive and meaningful measures of market risk. These reports should be published. Other hedge funds should be required to publish similar reports.
- Public companies, including financial institutions, should publicly disclose additional information about their material financial exposures to significantly leveraged institutions, including hedge funds.
- Financial institutions should enhance their practices for counterparty risk management.
- Regulators should encourage improvements in the risk-management systems of regulated entities.
- Regulators should promote the development of more risk-sensitive but prudent approaches to capital adequacy.
- Regulators need expanded risk assessment authority for the unregulated affiliates of broker-dealers and futures commission merchants.

- The Congress should enact the provisions proposed by the President's Working Group to support financial contract netting.
- Regulators should consider stronger incentives to encourage offshore financial centres to comply with international standards.

The report does not recommend direct regulation of hedge funds, noting that many might relocate offshore if an attempt were made to do this. However, it envisages direct regulation if the above measures do not work.

The report notes that concern has been expressed about the impact of the activities of highly leveraged institutions on financial market dynamics and vulnerable economies. However, the report expresses the view, following a number of independent studies, that such activities do not appear to have played a significant part in precipitating the financial crises of recent years.

#### Deutsche Bundesbank

In a March 1999 Report, *Hedge Funds and Their Role in the Financial Markets*, the Bundesbank acknowledges that hedge funds may contribute to greater market efficiency, but draws attention to the risks inherent in their investment strategies. The evidence suggests that hedge funds played a major role in the 1992 ERM crises, but not in the Mexico or East Asian crises. Calls for regulation of hedge funds are considered justified, the Bundesbank concludes. Since the insolvency of hedge funds could destablise the international financial system, it would be desirable for hedge funds to be directly regulated and required to report extensively and also to comply with investment and capital adequacy rules. However, the Bundesbank acknowledges that in a globalised environment with complex trading strategies, this goal may be difficult to achieve. The establishment of an international credit register for large exposures to facilitate banks' monitoring is recommended.

#### Reserve Bank of Australia

In a March 1999 report to the Australian Parliament, *Hedge Funds, Financial Stability and Market Integrity*, the Reserve Bank concludes as follows:-

- Regulation of some types of hedge fund is necessary in principle because of the risk they pose to financial system stability and integrity.
- However, hedge fund-specific regulation would be difficult because other institutions
  with similar risk profiles might spring up outside the scope of such expanded
  regulation.
- Hence, the most effective approach would involve (a) improved standards of disclosure concerning market concentration, counterparty risk assessments, and the health of financial markets; (b) improved risk monitoring practices on the part of institutions that enable hedge funds to take on large positions; and (c) removing

- existing distortions in the Basle capital framework. (Examples of the Basle distortions include the absence of a capital charge on short term foreign currency contracts, and the concessionary treatment of banks' derivatives exposures to non-banks.)
- Higher capital charges should be applied to banks' exposures to institutions that do not meet specified disclosure standards.

The report does not include empirical research, and the assertion of the in-principle need to regulate hedge funds is based mainly on observations by senior monetary officials (mainly Alan Greenspan in the wake of the LTCM fiasco and similar comments by the OECD.) However, there are some original points. The report acknowledges that improved disclosure might not be a panacea; for example, disclosure by a successful hedge fund of its strategies might even exacerbate a market crisis by encouraging emulation. Noting that international coordination may be difficult, the report advocates unilateral action by individual jurisdictions as being a great deal better than nothing.

#### **IOSCO**

In November 1999, IOSCO published a report on *Hedge Funds and Other Highly Leveraged Institutions*. The report defines highly leveraged institutions (HLIs) as institutions which are significant traders of financial instruments for their own account, and which combine the following characteristics: (a) significant leverage; (b) little or no direct regulatory supervision; (c) limited public disclosure. The report makes recommendations in four areas:-

- Strengthening risk management processes at securities firms that act as counterparties to HLIs.
- Guidance to securities regulators on scrutinising regulated firms' dealings with HLIs and encouraging these firms' sound practices.
- Improving information flows on HLIs to regulated counterparties of HLIs, regulators, market operators, and the public.
- Further work by IOSCO in cooperation with interested private sector and supranational bodies.

The central concern IOSCO identifies in relation to HLIs is in the area of market stability and systemic risk. HLIs may take on positions large enough to destabilise a regulated firm, a particular market or the global financial system. As a first line of defence against such destablisation, IOSCO recommends improved risk management measures on the part of regulated counterparties. However, since not all the needed information is generated by flows between the regulated counterparty and the HLI, public disclosure by HLIs directly is recommended. IOSCO looks to the Fisher Group for initiative on this issue.

#### **VOLUNTARY INDUSTRY INITIATIVES**

In recent years securities industry practitioners have developed initiatives of their own to address concerns arising from various market crises, including the LTCM episode.

#### **Derivatives Policy Group**

The Derivatives Policy Group (DPG) was formed in August 1994 by six major Wall Street firms to address public concerns raised by the OTC derivatives market activities of unregistered affiliates of SEC-registered broker-dealers and CTFC-registered futures commission merchants. The DPG provides the SEC and CTFC with information and analysis to help them evaluate the risks arising from OTC derivatives trading. The DPG imposes an oversight framework upon its members consisting of four components.

- Management controls. Emphasis is placed on the integrity of the process for measuring, monitoring and controlling risk; and (2) guidelines that clearly establish accountability for defining the permitted scope of activities and the acceptable level of risk.
- Enhanced reporting. Affiliates are required to submit periodic reports to the SEC and CTFC on credit concentration and portfolio credit quality relating to their OTC derivatives activities.
- Evaluation of risk in relation to capital. Affiliates must develop methods to evaluate the market and credit risk exposures arising from their OTC derivatives activities and evaluate those risks in relation to capital. Risk evaluation models must meet DPG standards and audit and verification criteria.
- Counterparty relationships. Guidelines are provided for professional intermediaries dealing in OTC derivatives with non-professional counterparties to discourage overreaching by the professionals and to assist understanding, through the provision of explanatory written material, by the non-professionals.

#### Counterparty Risk Management Policy Group

This policy group was formed in January 1999 by twelve major international commercial and investment banks. The objective of the group is to develop better standards for risk management practices at securities firms and banks providing credit-based services to counterparties such as hedge funds. It will also try to improve reporting to regulators. In June 1999, the group published a report on Improving Counterparty Risk Management Practices (ICRMP), which makes detailed recommendations on managing counterparty credit risk, market risk and liquidity risk. The reports stresses the need to adapt procedures continuously with the benefit of experience and sound judgement; hence it opposes attempts to codify management practice. Six principles are identified.

- Intensified information-sharing among counterparties, with safeguards to protect proprietory client information.
- An integrated analytical framework to assess the implications of leverage for various forms of risk such as credit, market and liquidity risk. Leverage is not a separate

- source of risk but a factor amplifying risks.
- Analysis of counterparty risk should take account of liquidity factors affecting contracts and collateral. Stress tests should probe for vulnerabilities.
- Strong internal credit practices should combine current creditworthiness with future exposures. Internal cost allocation and valuation should provide traders with incentives to proactively manage counterparty risks.
- Senior management should express their policies on risk, and establish an independent risk management function to enable them to monitor the firm's risk profile. Senior management should be prepared to meet their primary regulator to discuss risk.
- There is scope for improvement and harmonisation of standard industry documentation.

The report expresses concern with the public disclosure recommendations of the President's Working Group.

The International Organisation of Securities Commissions (IOSCO), while giving the ICRMP report credit for making a contribution, believes it does not go far enough. IOSCO would like all staff (not just senior management) of the regulated institution to share information with all relevant regulators (not just the primary regulator). IOSCO also supports public disclosure of HLI activities.

#### International Swaps and Derivatives Association 1999 Collateral Review

In March 1999, the ISDA issued a report on how collateral management programmes for OTC derivatives performed during volatile market periods in 1997/98, including the volatility surrounding the LTCM crisis. The report found that during this period collateralisation had proved itself a highly successful credit risk mitigation tool. However, in extreme conditions no collateral management programme can cover all risks. The recommendations of the report were for institutions to review their procedures with a view to minimising operational, organisational and legal risks; for the ISDA to continue its survey of secured transaction laws in various jurisdictions and to review its own standard documentation; and for regulators to remove barriers to advancement in risk management methodologies and cross-product netting and collateralisation.