Kostas Tsatsaronis
(+41 61) 280 8082
ktsatsaronis@bis.org

V. Special feature: Hedge funds

In early 1949, Alfred Winslow Jones, a sociologist and financial journalist, set up an investment partnership that was eventually to be regarded as the first hedge fund. His innovative strategy used a mix of short and long stock market positions with leverage, which emphasised the effect of security selection on the portfolio's performance while neutralising the effect of market-wide movements (hence the term "hedge"). Despite a solid performance record, Mr Jones's partnership remained a little-known fund on the fringes of Wall Street and his strategy found few imitators until a 1966 financial press article popularised it among the broad investor community. The first boom of the hedge fund industry was under way.[63] Since that time, financial market growth and deepening have been phenomenal, supported by a global trend towards market liberalisation and the rapid development of financial technology. Opportunistic and nimble investment vehicles, such as hedge funds, have been well positioned to take full advantage of the new opportunities created in this environment. As a result, the industry has grown in both size and importance while offering generous rewards to investors and principals.

At the same time, however, the industry has also acquired notoriety, having been associated, directly or indirectly, with nearly every major episode of financial market turmoil during the 1990s. In September 1998, almost 50 years to the day since the inception of Jones's fund, the financial troubles of another hedge fund seemed to be at the very centre of a storm that threatened the stability of the world's financial system. The potential failure of Long-Term Capital Management, which featured some of the most revered names in finance among its partner list, threatened to push already strained markets over the threshold of a systemic crisis.

This episode highlighted the potential for disruption to financial market functioning from the funds' activities, and prompted a broad reassessment, in both official and private forums, of the appropriateness of the operating framework of hedge funds. It has also influenced the attitudes of counterparties, creditors and, indeed, the industry itself towards the quantity and quality of information disclosed by hedge funds and the practices governing their business transactions. In a sense, the events of 1998 can be seen as marking the start of a new period in the evolution of the hedge fund industry. A period characterised by greater focus on consistency of performance and less emphasis on the mystique and personality cult of fund managers with fabled investing skills.

Structure, characteristics and attractiveness of hedge funds

Hedge funds are investment companies with legal and organisational structures conducive to an aggressive investment style. They typically operate as limited partnerships or choose to register offshore, in order to minimise reporting and regulatory requirements that apply to more widely marketed investment companies such as mutual funds. To minimise liquidity requirements, the funds place restrictions on withdrawals by investors. More importantly, the incentive structure for the managers encourages aggressive investment strategies. Management fees are highly sensitive to performance, which is in turn measured in absolute terms rather than relative to a peer group as is

[63] For a more detailed account of Alfred Jones's fund and the early years of the hedge fund industry, see Caldwell (1995).

often the case with other professional asset managers. In addition, fee structures often contain "high watermark" provisions that require the manager to make up for losses before receiving further incentive fees. In return, fund managers typically invest a substantial amount of their own money in the fund.

These attributes imply constraints on the size of the fund both because of legal restrictions on the maximum number of investors and on permitted marketing channels and because the inherent inertia of larger portfolios can cramp the opportunistic investment style. The absence of reporting requirements for most hedge funds means that there are no comprehensive data on the size of the industry. Estimates by the main commercial suppliers of hedge fund information range between 2,500 and 5,000 funds with between $200 and $300 billion in assets under management.[64] According to one of these sources, the average fund had just under $100 million in assets under management at end-1998, with more than 50% of all funds being smaller than $25 million. There were only 32 funds with more than $1 billion in assets under management. Nevertheless, the two largest families of macro funds managed sums in the neighbourhood of $20 billion each at their peak in mid-1998.

Yet the size of assets under management alone is not an accurate indicator of the potential impact of a single player on financial markets, since control over a much larger portfolio can be obtained through leverage. Indeed, more than other collective investment vehicles, hedge funds make use of leverage to enhance the potential profitability of their positions. Survey evidence indicates that three quarters of all funds make use of leverage, although only 16% volunteer that they operate with gearing ratios greater than 2:1. According to a different survey that focuses on a group of larger hedge funds, roughly one quarter of the equity invested in these funds is leveraged at least 10 times and one half is leveraged less than three times.

As is often the case in the professional portfolio management industry, hedge funds market themselves as following specialised investment strategies, or *investment styles*. It is useful to distinguish between two broad categories of investment style based on the fundamental investment philosophy. Funds in the first category take directional positions in expectation of an appreciation or decline in a specific asset's price. These strategies represent bets that existing relationships between asset prices are not sustainable. The "global macro" fund style is representative of this category. The second category comprises styles that aim at exploiting pricing anomalies or temporary distortions of securities' prices using strategies that bear closer resemblance to that followed by Alfred Jones. These funds use diversified strategies that combine both long and short positions on similar securities, the prices of which they judge to be misaligned, in the expectation that historical relationships will eventually reassert themselves. Leverage is also used to magnify potential profits since the pricing discrepancies that the funds attempt to exploit are typically very narrow. The strategy often relies on financial derivative instruments (frequently contracted in the over-the-counter market) to help insulate portfolio returns from other market risk factors unrelated to the specific pricing anomaly that is being exploited. Investment styles such as "market neutral" and "relative value arbitrage" fall into this category.[65]

The hedge fund industry has experienced rapid growth over the past several years, with the number of funds increasing each year since 1988. At end-1999, some industry observers estimated that there were more than 5,000 funds in operation, a fourfold increase from 10 years earlier. Assets under management have grown at twice this pace to surpass $300 billion. One remarkable feature of this steady growth is that the industry as a whole has weathered adverse market conditions relatively well,

[64] Assets under management refer to the sum of contributions by the hedge fund's principals and outside investors.

[65] Hedge funds share many of the above characteristics, including their investment styles, with other types of so-called highly leveraged institutions (HLIs). The proprietary trading operations of investment banks and securities companies are, for instance, virtually indistinguishable from hedge funds along many of these dimensions. The focus on hedge funds is nevertheless justified to the extent that they operate as separate institutions. They are thus distinct from other entities that may be subject to some degree of oversight – either because they fall under the supervisory umbrella or because they are subject to more demanding disclosure requirements.

Table V.1

Number, size and leverage of funds

		1990	1994	1995	1996	1997	1998	1999	2000[1]	Leverage
Global macro	Number of funds	16	80	68	69	74	74	66	66	161%
	Assets under management[2]	4.5	28.8	24.0	31.4	32.2	30.4	24.9	14.3	
Global established	Number of funds	42	179	196	239	284	314	291	329	142%
	Assets under management[2]	1.5	6.6	8.9	12.1	18.4	25.0	37.7	40.7	
Global emerging	Number of funds	24	166	191	247	218	154	142	148	139%
	Assets under management[2]	0.7	13.0	13.2	17.9	20.4	8.7	10.2	10.2	
Long only	Number of funds	–	10	11	21	27	25	25	24	223%
	Assets under management[2]	–	0.1	0.2	0.5	0.4	0.3	0.6	0.5	
Short sellers	Number of funds	7	18	14	18	20	22	20	21	113%
	Assets under management[2]	0.2	0.6	0.5	0.5	0.6	0.8	11.8	1.1	
Sectoral	Number of funds	1	22	35	54	80	83	100	133	124%
	Assets under management[2]	0.0	0.2	0.7	1.9	3.4	3.0	5.0	9.2	
Market neutral	Number of funds	20	148	179	227	276	288	277	292	256%
	Assets under management[2]	0.9	6.4	7.5	12.9	23.8	26.3	27.6	32.0	
Event-driven	Number of funds	20	66	85	118	135	129	118	133	133%
	Assets under management[2]	0.9	3.9	4.7	6.7	10.4	11.6	13.1	16.6	
Total (excl funds of funds)	Number of funds	130	689	779	993	1,114	1,089	949	1146	168%
	Assets under management[2]	10.2	70.3	71.2	99.2	132.1	127.9	130.9	121.9	
Funds of funds	Number of funds	33	198	232	284	314	296	318	346	114%
	Assets under management[2]	1.5	11.3	11.5	15.3	22.3	21.7	25.0	27.4	

Note: Leverage refers to the ratio of the sum of the funds' portfolio assets and liabilities to total assets under management, as reported to MAR Hedge by the funds. The reported figure corresponds to the size-weighted average for all the funds in each group that reported their leverage to MAR Hedge.

[1] Figures for the year 2000 refer to September. For all other years they refer to December. [2] In billions of US dollars.

Sources: FSF; MAR Hedge; author's calculations.

even the volatility that has characterised markets for most of this year. Indeed, on average, hedge funds have generated handsome returns for their investors, outpacing market benchmarks as well as other investment vehicles such as mutual funds. The fact that this investment performance typically exhibits a low correlation with broad market indices is an additional attractive feature of hedge fund investments. This last characteristic is a direct consequence of an opportunistic investment style that favours dynamic investment strategies and high portfolio turnover compared with other types of institutional investor that typically operate with a longer investment horizon. Hence, hedge funds offer considerable scope for yield enhancement and diversification to the sophisticated investor, at the cost of greater risk.[66] This risk is evident not only from the relatively high volatility of typical hedge fund returns but also from the high attrition rates in the industry. It is estimated that each year on average 7% to 10% of all funds cease operations.

[66] See Fung and Hsieh (1999).

Table V.2

Financial performance of hedge funds

	1994-97		1998		1999		2000	
	Return	**Sharpe ratio**	**Return**	**Sharpe ratio**	**Return**	**Sharpe ratio**	**Return**	**Sharpe ratio**
Convertible arbitrage	9.66	1.18	– 4.41	– 1.10	16.04	5.37	34.53	9.61
Dedicated short bias	0.26	– 0.33	– 6.00	– 0.35	–14.22	– 1.29	–19.55	– 1.21
Emerging markets	12.32	0.39	–37.66	– 1.61	44.82	2.05	8.23	0.14
Equity market neutral	9.86	1.22	13.31	2.48	15.33	5.45	19.25	9.18
Event-driven	15.18	2.35	– 4.87	– 0.70	22.26	4.43	10.73	1.35
Fixed income arbitrage	9.36	1.45	– 8.16	– 1.49	12.11	3.47	6.26	0.27
Global macro	20.68	1.10	– 3.64	– 0.45	5.81	0.07	3.32	– 0.22
Long/short equity	12.62	0.89	17.18	0.74	47.23	2.82	9.18	0.15
Managed futures	4.68	– 0.03	20.64	1.20	– 4.69	– 1.13	–10.15	– 3.48
All hedge fund styles	15.69	1.16	– 0.36	– 0.42	23.43	1.91	8.08	0.18
S&P 500	19.15	1.23	26.10	0.99	18.75	1.08	– 2.50	– 0.45
MSCI world equity	11.78	0.64	22.54	0.90	22.01	1.43	–10.96	– 1.06
Merrill Lynch corporate master bond index	– 0.26	– 0.83	5.45	0.10	–12.02	– 3.91	4.24	– 0.34

Sources: CSFB/Tremond; Datastream; author’s calculations.

Hedge funds and episodes of financial market turmoil

Before discussing the role of hedge funds in different episodes of market turmoil, it is useful to distinguish between two types of potential disruption to market functioning arising from the activity of any financial institution. Financial stability can be compromised when a market player is able to amass enough resources to single-handedly influence specific asset prices or tactically exploit its influence on other participants’ behaviour to tilt market momentum in favour of its own positions. In such circumstances, both the information content of market prices and their relationship with fundamentals are severely weakened, possibly giving rise to heightened price volatility. A quite different type of disruption arises when a highly leveraged institution with large and concentrated positions is confronted with a liquidity or solvency crisis. In this case, not only may the functioning of the markets where the institution has been particularly active be disrupted, but the institution’s counterparties, which helped it finance these positions, are also likely to experience serious losses. In both cases, the costs of misjudged investment decisions are likely to spread well beyond the equity holders of the leveraged institution. Indeed, depending on the nature of exposures and prevailing market circumstances, there may potentially be systemic implications. Hedge funds have been linked to both types of market disruption.

The 1992 ERM crisis

The ERM crisis was for many a milestone event that highlighted the ability of financial markets to disrupt policy targets. In particular, the fact that mounting speculative pressures forced several currencies to breach their respective fluctuation limits under the ERM, despite unprecedented amounts of official intervention, seemed to demonstrate the capacity of markets to overwhelm even the most formidable defences. The well publicised role played by the Quantum family of macro funds during this episode helped to elevate hedge funds near to the top of the list of those market players regarded

as having this capability. Public claims by the fund's manager of impressive profits from taking short positions against the pound sterling can be corroborated by the co-movement of Quantum's net asset value with the UK currency, as depicted in Graph V.1.[67] Furthermore, this episode helped illustrate the increasing significance of non-bank investors in a foreign exchange market which had traditionally been dominated by interbank activity.

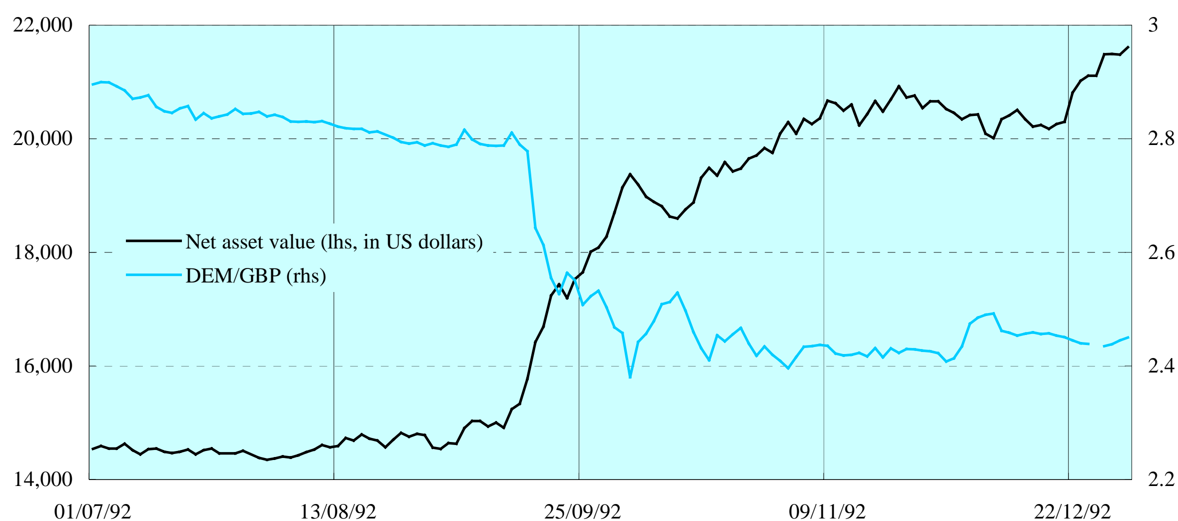
The Asian currency crises of 1997, and beyond

The background to the currency crises that rippled through the emerging economies of Southeast Asia during the second half of 1997 bears some similarities to that of the ERM crisis. Namely, the combined influence of external shocks and domestic financial imbalances undermined the credibility of exchange rate targets and eventually led to their abandonment. In contrast to the ERM episode, however, the role of hedge funds in this latter case has been less clear. Officials from the affected countries have often singled out hedge fund activity as a major factor behind the pressures that culminated in the devaluation of many currencies in the region. Anecdotal evidence also lends support to the view that individual funds put in place short positions on Asian currencies in the expectation that their US dollar parities would not be sustainable. To date, however, there has not been concrete evidence of large-scale involvement of hedge funds, certainly not to a degree that could account for the total cost to official reserves from defending the national currency. Statistical estimates of the aggregate short positions of the largest macro hedge funds on the affected currencies never exceed the equivalent of $11 billion during 1997, mostly concentrated on the Thai baht.[68] This contrasts with the nearly $35 billion reduction in lending by BIS reporting banks to the region during the second half of 1997.

Hedge funds reportedly maintained a presence in the Pacific region during most of 1998 and intermittently exerted pressure on the Australian and New Zealand currencies as well as Hong Kong's financial markets. Several local market observers have pointed to a build-up of short currency positions by hedge funds through forward sales and derivatives. These plays were often combined with matching short positions in the bond or equity market designed to profit from interest rate

Graph V.1

The Quantum Fund and the pound sterling in 1992



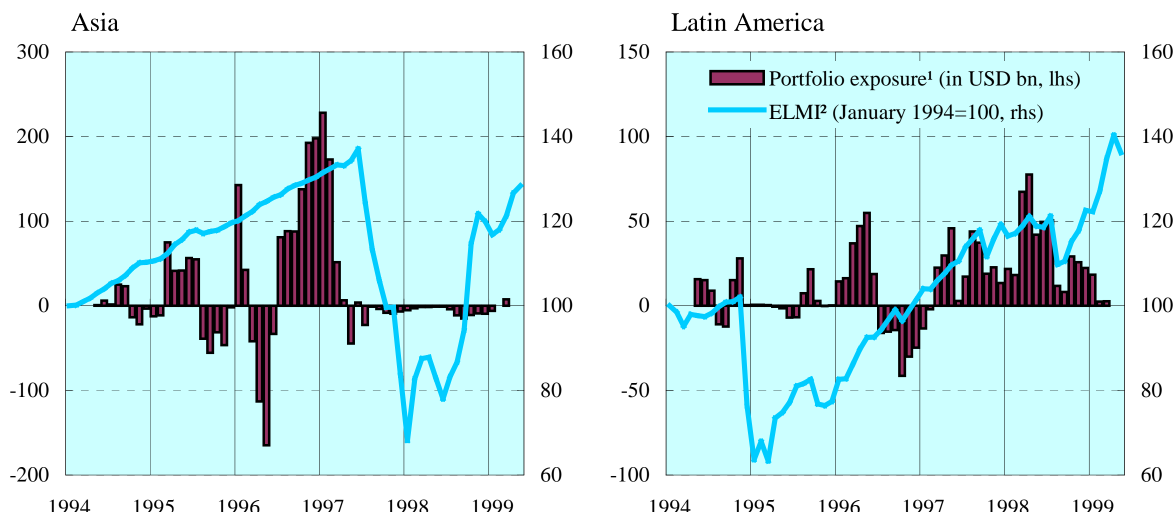
Sources: Reuters; Financial Times; national data.

[67] Net asset value (NAV) is a measure of the fund's net worth akin to that of the share price for a company.

[68] See Fung et al (2000).

Graph V.2

Estimated portfolio exposure of hedge funds to emerging markets



[1] Calculated as the product of the fund size and the sensitivity of reported portfolio returns to the market index. [2] JP Morgan Emerging Local Markets Index.

Sources: Managed Accounts Report Inc; JP Morgan Securities Inc.; BIS calculations.

increases in defence of the exchange rate. Moreover, officials in the region have also pointed to questionable practices by the funds and other players, such as engaging in collusive behaviour and spreading selective or false information, that verge on unethical market conduct.[69]

While evidence of this activity has been mainly anecdotal, Graph V.3 presents some circumstantial support for the view that leveraged plays were behind the pressure on the Australian and New Zealand dollars in the third quarter of 1998. Between 9 and 16 October 1998, both currencies registered their largest one-week gains against the US dollar since 1985. These gains came on the heels of several weeks of near-record losses for the two currencies during the preceding two months.[70] The sharp appreciation of the Australian and New Zealand dollars also coincided exactly with a 12% appreciation of the yen against the US currency. This last event caught off-balance many speculative portfolios, including hedge funds, that had taken advantage of the combination of persistently low Japanese interest rates and a strong yen in the so-called yen carry trade. Indeed, the magnitude of the yen's move was partially attributed to panic buying of the currency to cover short positions.[71] The losses experienced by the Jaguar fund, flagship of the Tiger family of macro hedge funds, were estimated to exceed $2 billion during that same week. The timing of these events lends support to the view that the unwinding by leveraged investors of the yen carry trade forced these players to liquidate profitable investments and to re-evaluate the profitability of other speculative positions, including those against the Australian and New Zealand dollars.

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[69] For an examination of these practices and their impact on market integrity, see the "Report of the market dynamics study group" included in the Financial Stability Forum's report on HLIs.

[70] The Australian dollar, in particular, marked its largest and 10th largest five-day fall against the US dollar for the past five years during the weeks of 24 August and 21 September 1998 respectively.

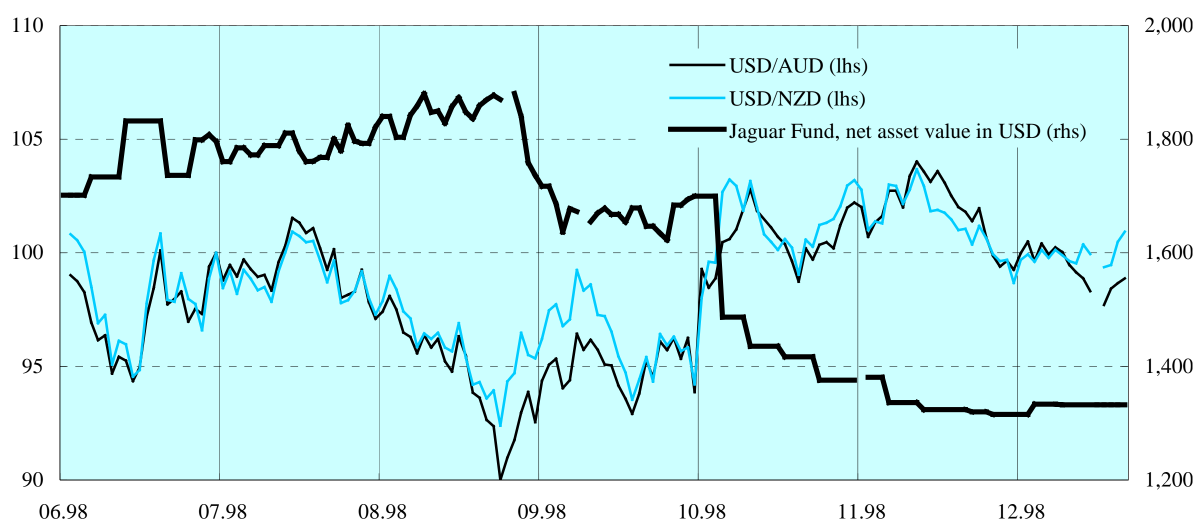
[71] For a discussion of the yen carry trade and its role in the appreciation of the yen in October 1998, see BIS (1999).

The near collapse of LTCM

The disorderly market conditions that prevailed as investors sharply repriced risk in the wake of the Russian debt moratorium gave rise to highly atypical asset price dynamics and played havoc with investment strategies based on historical pricing relationships. Long-Term Capital Management (LTCM), a large hedge fund marketed as specialising in leveraged relative value arbitrage strategies, found its portfolio heavily exposed and its management was unable to contain the deterioration of its financial position.[72] Funded by credit at favourable terms supplied by many leading institutions, the fund had been able to build a portfolio that exceeded its assets under management by more than 25 times. Moreover, the fund was arguably the most active user of interest rate swaps in the world, with such contracts accounting for $750 billion of its total notional derivatives exposure of more than $1 trillion in August 1998. The uncertainty about the potential ramifications of a disorderly bankruptcy of LTCM both for its immediate counterparties and, given the already fragile state of financial markets at the time, for the financial system at large prompted the intervention by the Federal Reserve to facilitate a private sector solution. A consortium of 14 of the fund's creditors injected $3.6 billion of new capital into the fund in exchange for a 90% ownership stake and the assumption of control over the reduction in the fund's leverage and the unwinding of its portfolio.

Graph V.3

The effect of deleveraging on the Australian and New Zealand dollars



Sources: International Herald Tribune; Financial Times; national data.

The policy response

The repeated coincidence of financial turmoil and market disruption with hedge fund activity has raised the question of the appropriateness of the existing operating and regulatory framework for the sector. In the wake of the LTCM episode several groups, from both the official and private sectors, were established to consider the issues and propose action.[73] Given the sophistication of hedge fund

[72] See also *A Review of Financial Market Events in Autumn 1998* published in October 1999 by the Committee on the Global Financial System.

[73] The official sector groups were: the Basel Committee on Banking Supervision HLI Working Group, the IOSCO Task Force, the Financial Stability Forum HLI Working Group and the US President's Working Group. Private sector initiatives include the Counterparty Risk Management Policy Group, ISDA and a group of five large hedge fund managers.

investors and creditors, the focus of these groups was on intervention that would limit the potential economic costs from the funds' activity that are external to these parties. Particular attention was paid to how best to minimise the potential for market disruption without distorting market players' incentives or compromising the efficiency of the market mechanism.

The bulk of the proposals focus squarely on the main channel through which a fund's difficulties may be transmitted more widely: its effect on creditors. Sound risk management practices by hedge fund counterparties represent the most effective safeguard against the build-up of excessive leverage. Correct assessment and pricing of credit exposures needs to feed through into comprehensive measurement and management systems for both current and future risk exposures. These have to be complemented by due diligence procedures as well as pricing and collateralisation arrangements that accurately reflect the underlying risks. Both the private and the official sector bodies stress the importance of strengthening internal risk management structures.

Another common feature of the proposals is the emphasis on the importance of institutions regularly requesting from their highly leveraged counterparties all the information necessary to form a comprehensive view of their risk profile. Despite the fact that the shortcomings of current business practices are generally accepted, private sector initiative has fallen short of generating an adequate level of disclosure. Recognising this deficit, many reports also suggest that market discipline should be supported by the establishment of disclosure standards for a wide range of individual institutions. Developing such standards is a complex task that requires the careful balancing of the natural tension between meaningfulness, comparability and timeliness of the information disclosed against the legitimate desire of institutions to protect their commercial interests and competitive advantage.

In a further effort to enhance market transparency, it has been argued that quantitative and qualitative information on supervised institutions' exposures to hedge funds and other highly leveraged institutions should also be collected by regulators. This information would help the official sector to make a more accurate assessment of individual institutions' soundness as well as systemic fragility. To the same end, the official sector has been encouraged to strengthen the surveillance of financial market activity by refining and expanding the collection of information on OTC derivatives and foreign exchange markets.

Addressing concerns that certain trading practices adopted at times by market participants, including hedge funds, can compromise the integrity of financial market, the issue of a code of market conduct has been revisited. More specifically, the report by the Financial Stability Forum encouraged both leading market participants and competent national authorities to articulate new market codes and guidelines and revise existing ones as necessary. A draft model set of such guidelines has been produced by a working group of private sector participants and is expected to form the basis for future discussions.

Complementary to the above proposals, there have also been calls for more direct supervision of hedge funds themselves. The underlying rationale is that, to the extent that hedge fund activity may give rise to disruptions with systemic implications, these institutions should be subject to rules broadly similar to those that apply to other regulated financial entities. Such rules could take the form of more demanding reporting requirements or, at the extreme, a prudential regulatory framework including a licensing regime and explicit leverage and liquidity standards. Clearly, this would raise a number of practical and conceptual questions by requiring a legal definition of what constitutes a hedge fund and a prudential assessment of what constitutes the appropriate financial structure for its operations. It would also raise the risk that official oversight could substitute for market discipline. The official bodies decided against taking steps in this direction but reserved the right to revisit the issue should progress along the other lines not be adequate.

Hedge funds post-1998: dinosaurs or Darwinian survivors?

Arguably, the LTCM episode represented a landmark event in the evolution of the hedge fund industry. In its aftermath, an extensive re-examination of the role and the business framework of hedge funds by the industry itself, its counterparties and the policy community has resulted in a number of

significant changes. One could broadly describe the situation as one of "*cleansing*" to rid the financial system of the combination of high leverage and ill-controlled counterparty exposures related to hedge funds, and one of "*institutionalisation*" of investment in hedge funds as a legitimate alternative asset class for institutional portfolios.

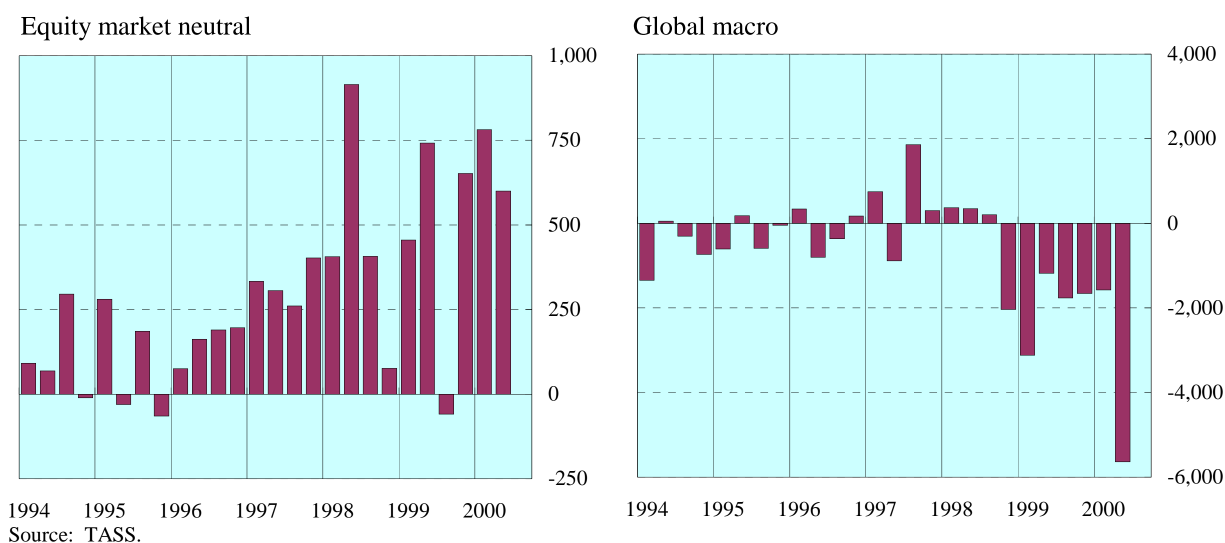
Over the past two years, three of the most celebrated fund names have withdrawn from the front stage of the investment world and the macro fund sector has experienced a haemorrhage of investors' funds. The management team of LTCM has overseen the repayment of the creditors' consortium, but has fallen short of the fundraising target for its new hedge fund as investors are reportedly less forthcoming than expected, despite the less aggressive investment profile of the new venture. In March this year, the Tiger family of funds was liquidated after being unable to either reverse its sagging performance or stop the outflow of investors' funds. One month later and on the heels of persistent disappointing returns, the management of the Quantum family of funds announced its plans for downsizing, including the closure of some funds and the adoption of a less opportunistic investment strategy.

The travails of Tiger and Quantum are indicative of the problems confronting macro hedge funds in general (Graph V.4). In fact, many commentators have argued that these problems are symptomatic of more general factors affecting the hedge fund industry overall as well as the profitability of the investment philosophy underlying the macro style. The immediate reaction of many hedge fund creditors to the LTCM episode was to sharply curtail their exposure and institute tighter control over

Graph V.4

Flows into macro and market neutral funds

In millions of US dollars



Source: TASS.

further extensions of credit. As leverage is a key element in hedge fund strategies, many funds had difficulties in returning to a pre-crisis scale of activity. In addition, some macro hedge fund managers have also lamented that a strong historical investment performance record has been of no help to them in understanding, let alone predicting, asset price movements over recent years that defy their analytical framework. Finally, commentators have also pointed to the multibillion size of the largest families of funds, arguing that growth had bred inertia and reduced stealth and nimbleness. It became increasingly difficult for the funds to quickly enter and exit markets and take advantage of opportunities without inviting a large number of followers.

Independently of the exact causes of the decline in their fortunes, the retrenchment of macro fund activity has been viewed by many as having reduced the number of investors more likely to take a contrarian view. The fact that liquidity in many markets, most notably foreign exchange, has failed to regain levels seen before autumn 1998 is cited as a consequence of the reduced diversity in the

composition of market participants. Arguably, dynamic investment strategies practised by hedge funds can strengthen market mechanisms for price discovery by contributing to market liquidity, especially in certain peripheral and OTC market segments. Clearly, however, these benefits are heavily conditional on the financial soundness of the funds themselves. Price discontinuities can result if hedge funds confronted with losses or liquidity problems suddenly curtail their active participation in these markets.

Headline news of the macro fund demise, however, should not mask a number of gradual but no less important developments that are likely to permanently affect the operating framework of the hedge fund industry as well as its function within the financial system. Hedge fund creditors and counterparties have been re-evaluating procedures for the assessment and pricing of risks and practices regarding their business relationships with the funds. While progress has been uneven and some areas require closer attention, a number of steps have been taken in the right direction.[74] The initial credit crunch has given way to more sophisticated management and control of exposures. In general, more detailed and timely information is now required, and increasingly greater attention is paid to the legal detail of master agreements regarding collateral, margining and default. Hedge funds themselves have also begun to adjust to the new environment, demonstrating a greater willingness to abide by more demanding disclosure standards and tighter credit exposure control procedures than in the past. Some funds have openly collaborated with private and official groupings in examining ways that could prevent LTCM-style episodes from happening in the future and minimise their impact if they did. Many have also supported mechanisms that promote transparency in practical ways, such as the establishment of an open exchange for shares in hedge funds that agree to predetermined disclosure standards.

On the other hand, there appears to be a greater acceptance of the idea that hedge funds represent legitimate investments that can complement well diversified institutional and high net worth individual portfolios. A number of pension funds and other mainstream institutional investors have publicly advertised their increased interest in so-called alternative investment vehicles, which include hedge funds. The example of the California Public Employees retirement fund is probably the best known, but by no means the only case. The impressive gains of equity markets over the recent period have augmented the ranks of wealthy private investors but have also created anxiety with the high valuation of the markets and uncertainty regarding the correct paradigm for the interpretation of those valuations. Market neutral investment styles practised by many hedge funds have attracted the attention of investors seeking to protect their gains against equity market swings. Tapping into the high net worth market has been a driving force behind the accelerated growth of the hedge fund industry in new regional markets such as East Asia and especially Europe. Market observer reports bring the number of new European funds to 75 for the first half of this year, five more than the equivalent figure for the whole of 1999.[75] Many of these funds have been created by banks and asset managers as part of a more general business growth strategy based on a strong private banking arm.

In summary, the two years since the LTCM episode have been a period of reassessment of the role of hedge funds in the financial system. Drawing on its own experience and the proposals of official bodies, the private sector has begun to address the practices that left many institutions vulnerable to the failure of HLIs. Similarly, the hedge fund industry itself appears to be in the process of moving gradually away from the image of aggressive and secretive speculators, and towards one of controlled, sophisticated investment vehicles that offer opportunities for a well planned diversification and yield enhancement to “real money” investors. While these trends enhance the resilience and efficiency of financial markets, it is important that current gains are consolidated and further improvements are made along the same lines. This would be the only way to ensure that appropriate structures are in place to deal with market turmoil long after the memories of autumn 1998 have faded.

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[74] The review by the Basel Committee on Banking Supervision of the implementation of its report on sound practices in banks’ interaction with HLIs provides a detailed assessment of the response to the report’s recommendations.

[75] See Farrow (2000).

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