Knowing how to hedge your bets

Hedge funds have had a chequered history over the past few years. They have been blamed fairly or unfairly for all manner of financial consequences. But, as **DESMOND CHAN** explains, hedge funds are here to stay, and they can provide a viable investment alternative.

Hedge funds have been around since the 1940s. Large American corporations like IBM have been investing in hedge funds for years, and it is commonly known that 'Ivy League' universities like Harvard are aggressive investors. However, hedge funds came into prominence following the collapse of Long-Term Capital Management[1] in September 1998, and the spectacular attack on the pound sterling led by George Soros.

Hedge Funds—what are they?

Global financial markets can no longer ignore the enormous impact and the growing influence of hedge funds in their quest for alpha[2]. Carol J. Loomis in her 1966 Fortune article used the term 'hedge funds' for the first time. Since then, the term has become a catch-all for various non-traditional funds. The plethora of newer alternative investments available today are not totally hedged, yet are considered hedge funds. The distinction between hedge and non-traditional funds is ambiguous.

Hedge funds are investment pools typically organised as private partnerships and are often domiciled in tax havens like Bermuda for tax and regulatory reasons. Crerend offers the best description of hedge funds:

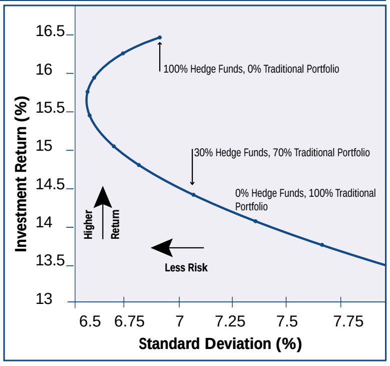
Hedge funds are private partnerships wherein the manager or general partner has a significant personal stake in the fund and is free to operate in a variety of markets and to utilise investments and strategies with variable long/short exposures and degrees of leverage.

Hedge funds have traditionally been sold privately to more investment savvy or wealthy investors. The Internet has been a resourceful bridge linking hedge fund and investors.

Hedge funds can be risky, as demonstrated by LTCM. However, risk can easily be mitigated by not holding a single security, but by diversifying through a basket of securities with dissimilar characteristics or negative correlation. The most commonly used instruments are derivatives, and these offer investors an efficient exposure to capital markets with minimal capital outlay.

Basic tertiary finance theory defines 'hedging' as transactions that protect against adverse price movements. The objective is to alleviate risk by implementing a covered call[3] or portfolio insurance[4] strategy. One of the benefits of investing in hedge funds is reduced portfolio risk[5]. The Markowitz efficient frontier (see Graph 1) explains that diversifying among asset classes with low to negative correlations can create efficient investment portfolios.

Graph 1 **Lower risk from including hedge funds in portfolios**



Source: Direct Investments Services website

DESMOND CHAN
SIA (Aff) was formerly an Investment Associate at Ausbil DEXIA Investment Managers. He co-managed the Listed Property Trust fund and assisted in Tactical Asset Allocation strategies.
desmondckchan@hotmail.com

Most hedge funds exhibit a low correlation to traditional markets.

Leverage is the use of borrowed money or securities for investments. While higher leverage implies a higher financial distress probability, it is of greater concern if illiquid positions need to be liquidated quickly.

There is a deep-rooted misconception that hedge funds are the cause of market volatility. A key issue that has developed is whether hedge funds have become market steerers. There is no conclusive evidence. There is also no evidence that traditional funds position themselves in the footsteps of hedge funds.

Contrary to popular belief, when large moves are underway, data show hedge funds often act as contrarians, leaning against the wind, and serving as stabilising speculators (Eichengreen & Mathieson, 1999).

Hedge and mutual funds—the contrast

Mutual or wholesale funds are more highly regulated than hedge funds. In Australia, the Australian Securities and Investments Commission[6] and the Australian Prudential Regulation Authority[7] regulate wholesale and superannuation funds predominantly. As part of the regulations, wholesale funds are mandated not to engage in shorting stocks or in the use of leverage to trade in derivatives. Hedge funds in comparison have the double-edged sword of being able to do exactly that, as well as in activities encompassed by wholesale funds. The key distinction of hedge funds that sets them apart lies in their flexibility to invest.

Under Australian securities regulations, it is mandatory for the management company of a wholesale investment fund to have a board of directors. This is to ensure that the directors of the management company assume the role of the responsible entity. In addition, minimum net worth requirements must be satisfied before a wholesale fund can be established.

An individual by comparison can set up a hedge fund and there is no hefty minimum net worth requirement for the hedge fund manager's management company. Traditional fund managers typically do not have a lot of their net worth tied up in the funds, whereas hedge funds managers typically do. Thus a hedge fund manager's interests are aligned with investors.

Hedge funds are marketed as oriented towards absolute performance (performance above zero), instead of performance relative to a certain benchmark or index.

This is explained by the lack of meaningful benchmarks resulting from the flexibility of the funds and the possibility of going long and short. Traditional fund managers measure their success on a relative performance basis. A hedge fund is only considered successful if it is profitable.

Investors worldwide would have noticed various investment management companies fiercely promoting their funds. Underlying this practice is the fact that investment management firms and their managers are renumerated by the management fees on the size of the pool of funds they manage, rather than by performance itself.

Hedge fund managers are similarly remunerated and are also motivated to perform with a percentage of the profits. Critics of incentive fees argue that this induces the manager to assume greater risks to increase profits.

As contrarians, hedge funds are less inclined than other investors to buy and sell in the same direction as the market. They are not bound by their prospectus to invest new inflows of capital in the same manner as existing capital.

When a market is falling, hedge funds can wait it out, while wholesale funds may be required by their internal controls to liquidate positions. Hedge funds are often able to wait for a reversal due to their ability to draw on credit lines to top up margin accounts or because their investors are locked in for substantial periods.

Hedge fund managers for the most part are veteran Wall Streeters who have decided to go into business for themselves—investing their own money[8] and the funds of a handful of clients and receiving a hefty portion of the profits.

With knowledge of underlying market risks, it is therefore not surprising that most hedge fund managers have risk management backgrounds.

Investment styles

Hedge funds use numerous distinct investment strategies with varying degrees of risk and return. For example:

Long/Short Strategy: The most frequently used strategy by far, where the manager attempts to achieve absolute returns regardless of market directions and not necessarily to beat an index. A proficient long/short hedge fund manager is usually an excellent stock picker who is able to simultaneously purchase those securities which are likely to rise and to sell borrowed securities, with the aim of repurchasing them at a profit after they decline.

Fixed Income Arbitrage: Aims to exploit pricing anomalies within and across global markets and their derivatives. Managers usually take offsetting long and short positions in the similar security and seek to profit from breakdowns in mathematical relationships.

Aggressive Growth: Invests in sectors like life sciences, which are expected to experience high earnings growth. Hedges by shorting equities when earnings disappointment is expected or by shorting stock indexes.

Short Selling: Profits from shorting stocks in anticipation of repurchasing at lower prices. Short sellers earn interest on the cash proceeds from the short sale of stock. Often used to offset long portfolios and when the market is near the bearish cycle. Also used to protect a paper profit by selling a stock already owned.

Convertible Arbitrage: Trades in a related security whose future relationship can be reasonably predicted. Convertible securities or bonds are considered hybrid in nature due to their ability to be exchanged into the common stock of the corporation issuing the convertible security.

Distressed Securities: Invests in equity, debt or trade claims at steep discounts and seeks to profit from the market's lack of understanding of the security's true value and the inability of investors to hold below investment grade securities.

Macro: Uses an opportunistic, top-down approach following major changes in global economies. The manager hopes to realise profits from changes in government policies, which in turn affect interest rates and a host of other economic factors.

Opportunistic: Profits from sudden price movements by investing in anticipation of a specific event such as a merger transaction, hostile takeover, or exiting of bankruptcy proceedings.

Emerging Markets: Invests in less developed markets to profit from correctly riding against increased volatility and inflation. Short selling may not be permitted and the lack of effective hedging makes this strategy riskier.

Value: Invests in undervalued or 'unpolished diamond' stocks in expectation that their value will rise once their profile increases.

Arbitrage: Attempts to profit from analysing and identifying pricing discrepancies arising from mergers and acquisitions and other events that affect securities prices. Such techniques are commonly known as event-driven strategies and are largely driven by the dynamics of a particular event, rather than by the changing levels of capital markets.

Equity Market-Neutral: Aims to produce consistent returns with very low volatility and correlation.

Hedge Funds at Work

Hedge funds played a dominant role in the Asian currency crisis. In October 1997 in Hong Kong, hedge funds commenced their attack on the US pegged Hong Kong dollar. In a fiercely fought battle over two months, the Hong Kong Government came out of it relatively unscathed, averting a stock market crash. The experience taught regulators to be extra vigilant, bolstering controls encompassing the stock market and financial futures.

In mid-1997, hedge funds took significant short positions in the Thai Baht. Many investors claimed that short sellers in neighbouring countries were the primary short sellers. The fact that hedge funds were active in shorting the Baht may prove that they had a role in the Baht collapse.

Hedge funds were also blamed in the collapse of Malaysia's Ringgit. The initial pressure on the Ringgit appears to have come from institutional investors closing out long positions in stocks.

Research showed no indication that major hedge funds profited from the collapse of Malaysia's Ringgit or other South-east Asian currencies during August and September 1997. Similar evidence was shown in South Korea as well[9].

The Malaysian Prime Minister Mahathir was unimpressed, imposing capital controls and adopting a pegged exchange rate regime by fixing the exchange rate at RM3.8 per US dollar. The Malaysian controls demonstrate a tool which developing countries can use to defend themselves against speculators and volatility.

If Soros had in fact rigged the Ringgit's collapse, as alleged by Mahathir, it is interesting to note that three of his funds broke even during the meltdown.

Another note of interest is that one of the dominant hedge fund names that investors often heard during the Asian financial crisis, the Julian Robertson managed Tiger fund, has since folded. It was once the world's largest hedge fund, with more than US$22B in assets.

One can easily understand the procrastination of Asian countries in embracing hedge funds, considering the volatility caused. The vexing dilemma is that most Asian markets are anxious to embrace the benefits of hedge funds, but are reluctant to accept any of the burdens.

Should hedge funds be regulated?

Hedge fund managers short currencies and can cause problems when they speculate heavily in markets where they identify economic imbalances. The LTCM debacle has clarified that existing laws are inadequate. But are laws on hedge fund activities or bank lending practices inadequate? Should hedge funds be kept on a leash? The answer is NO.

In the wake of the LTCM debacle, the Basle Committee for Banking Supervision released the "Report on Highly Leveraged Institutions". The report acknowledged the dangers of hedge funds and outlined the risks which they impose on global markets.

The report recommended sound risk management practices among lenders to highly leveraged institutions. It did not recommend hedge fund regulation.

Hedge funds do not cause financial meltdowns simply by speculating heavily in markets. The root of the problem lies in excessive leveraging above an existing capital base, extended by willing banks.

This becomes a major problem when this leverage cannot be covered during adverse market movements. LTCM has shown that with a capital base of US$4-5B, it was able to secure loans of US$200B and had US$1,300B of positions, necessitating a US$4B rescue.

Many investors pointed out that the LTCM rescue and the defence of the Hong Kong dollar encouraged greater risk-taking, creating the potential for the free market system to breakdown. The LTCM collapse alone cannot put the free market system in jeopardy.

Banking institutions must shoulder some of the blame related to speculative lending practices.

Unfortunately, global banking history has shown that banks often over-extend themselves sector after sector and often with severe consequences.

Unfortunately, global banking history shows that banks often overextend themselves sector after sector and often with severe consequences.

The massive South-east Asian and Japanese bad, negative or non-performing loans are an example.

The outlook for hedge funds

According to US hedge fund database TASS, net inflows into hedge funds hit nearly US$7B in the first quarter of 2001, compared to US$8B for the whole of 2000. The explosive growth of hedge funds has now created a mania in Asia. Market regulators like the Monetary Authority of Singapore[10] have halved the minimum investment in hedge funds from $200,000 to $100,000. This is an affirmative action by the authorities to kick-start the domestic hedge fund industry and market.

The Hong Kong Securities and Futures Commission is also expected to issue a consultation paper soon, proposing to allow retail investors to trade hedge funds with a minimum investment.

The Wall Street Journal reported that 1999 was one of the best years, with US hedge funds returning 41% before fees compared to a 21% increase in the S&P500. Such stellar performance was achieved on the back of lower volatility. It is therefore difficult to imagine that hedge funds will experience difficulty in promoting themselves.

CONCLUSION

There is a need for hedge funds, their financiers and even investors to thoroughly understand the concepts that underlie counterparty risk from both a risk management and operational perspective.

Many valuable lessons have been learned from the past, and current events are perpetually changing the dynamics of hedge funds. The hedge fund industry will continue to grow at a rapid pace and will be difficult to ignore as an alternative investment product.

Supporting this growth has been an increasingly large number of banks and traditional asset management firms launching their own hedge fund products in response to investors thirst' for higher alpha with lower volatility.

NOTES

1 Robert Merton and Myron Scholes created LTCM, employing sophisticated mathematical formulae. Their methods worked in stable market conditions. However, these techniques overlooked the recent collapse of the Rouble. Basis risk wiped out LTCM returns.

2 Alpha (∝) is the excess return over the market's return.

3 Covered call is the sale of a call option while maintaining a long position in the underlying stock. Also known as an 'income pick-up strategy".

4 Portfolio insurance using put options is a hedging strategy that involves holding the underlying security and buying a put option. Hedgers can still enjoy upside potential net of the insurance cost of the put.

5 Risk is mainly calculated by these measures:
Standard Deviation: The dispersion from the mean observation. This measure is often expressed as a percentage on an annualised basis.
Sharpe Ratio: Ratio that expresses a risk-adjusted rate of return. The Sharpe ratio is calculated as:

$$\frac{\text{Annual ROR—Risk free rate ROR}}{\text{Annualised standard deviation}}$$

6 ASIC—an independent Commonwealth government body established by the Australian Securities and Investments Commission Act 1989. Its main objective is to protect investors, superannuants, depositors and insurance policy holders.

7 APRA's mission is to establish and enforce prudential standards and practices designed to ensure that, under all reasonable circumstances, financial promises made by institutions under supervision are met within a stable, efficient and competitive financial system.

8 78% of hedge fund managers have in excess of USD500,000 personally invested in the funds they manage, according to Van Hedge Fund Advisors.

9 Choe and Kho attempted to ascertain whether foreign investors behaved in a manner that could be destabilising. It was found that foreign investors moved in herds, often buying shares that have recently shot up and shorting shares which have recently dropped. They concluded that there is no evidence that large foreign selling was a prelude to falling stock prices, when foreign selling was higher than foreign buying on the Korean exchange.

11 MAS is a government organisation whose mission is to promote sustained and non-inflationary growth of the economy, as well as foster a sound and progressive financial services sector.

REFERENCES

Brown, S., Park, P. and Stulz, R., (1997), Hedge Funds and the Asian Currency Crisis, NBER Working Paper No. 6427.

Choe, H. and Kho, B.C. (1997), Do Foreign Investors Destabilise Stock Markets? The Korean Experience in 1997, NBER Working Paper No. 6661.

Clifford, A., Krail, R. and Liew, J. (May 2001), Do Hedge Funds Hedge?, *Journal of Portfolio Management*.

Crerend, William J. (1998), Fundamentals of Hedge Fund Investing—A Professional Investor's Guide, McGraw-Hill.

Eichengreen, B. and Mathieson, D. (1999), Hedge Funds: What Do We Really Know?, International Monetary Fund Working Papers.

Harvard Business School (June 2001), Baker Library Guide to Hedge Funds website. (Available from www.library.hbs.edu/hedgefunds.htm)

Ineichen, A.M. (2000), In Search of Alpha, UBS Warburg.