MARKOWITZ IS DEAD

"The [investor's] deadly enemies are: Ignorance, greed, fear and hope. All the statute books in the world and all the rule books on all the exchanges of the earth cannot eliminate these from human nature"
- Reminiscences of a Stock Operator by Edwin Lefevre

There is nothing better than a good funeral but Modern Portfolio Theory had, until 2007, just refused to lie down and die. No doubt, for friends and family of Harry Markowitz's Modern Portfolio Theory, its failure to adequately protect investors through passive diversification in 2002 and again in 2008 has caused much grief. For retail investors, susceptible to emotional responses to market volatility and facing finite investment time frames, Modern Portfolio Theory's latest failing will likely prove to be the proverbial nail in the coffin.

The disproportionate volatility of shares relative to bonds in a Markowitzian optimised portfolio results in a boom/bust investment experience. Markowitz assumes away the problems associated with volatility by catering to the 'rational investor' who adopts a buy-and-hold strategy. New Zealand Funds Management Ltd (NZ Funds) has, in practice, found the rational investor elusive. In our experience, investors are better categorised as 'human' with the full range of emotions that brings. For example, a behavioural trait observed over the past twenty years of business has been that the higher an asset class climbs the more money New Zealanders allocate to it. Therefore, many investors are likely to have suffered from investing near the absolute peak of the share market. When faced with a global share market slump of the magnitude seen in 2002, and again in 2008, they capitulate. Having invested near the peak, they sell at the bottom. This is the price for being human. It is a natural consequence of having at least two seemingly irreconcilable goals mashed into a single portfolio – the need to regularly meet short-term expenses and the desire for long-term asset growth.

This is precisely the conundrum that NZ Funds' goal-based advice proposition (which is delivered in conjunction with independent financial advisers) addresses. Creating a separate portfolio to match each of the client's goals helps them to remain invested during periods of share market volatility as only a portion of their savings will fluctuate in value. Clients have enough to live on in one portfolio, while participating in the opportunity to grow their capital in a separate portfolio. With no threat to their immediate lifestyle, clients make more thoughtful and open-minded decisions about their long-term wealth creation.

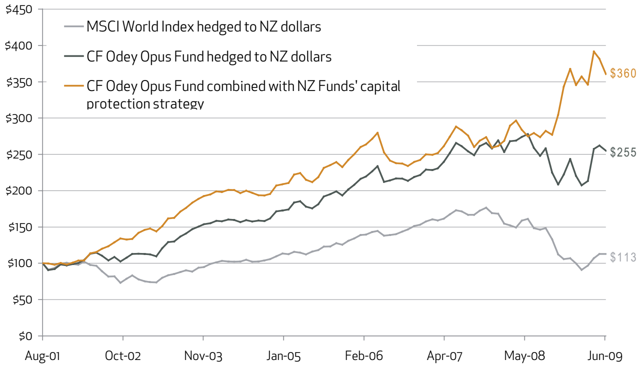
A further and arguably more damaging weakness of Modern Portfolio Theory is its failure to take human time frames into consideration. In theory, a drop in the value of global shares is a temporary setback which will be recovered in time. In practice, the average New Zealand investor with a meaningful capital allocation to global shares is between 50 and 60 years of age. For these investors twenty years is the only time period of relevance for assessing whether global shares represent a sound investment for their retirement. An extension of the required investment time beyond twenty years, due to a significant fall in the value of their share portfolio, is as good as a loss.

As recent share market volatility has shown, it is impossible to time the market on a daily basis. However, we do believe it is possible to mitigate periods of excessive volatility that results in irrecoverable losses for investors with a finite investment time frame.

Our strategy is relatively simple. We are long-term investors in shares which we, or our external managers, perceive to have superior valuation characteristics. But we recognise that during some periods all shares will suffer as part of a wider market malaise. We aim to identify these periods around the points at which they begin and end, and seek to preserve our clients' capital during these stages of the cycle. It is the successful implementation of this philosophy that has distinguished NZ Funds since November 2007 and will continue to do so in the future.

Within this framework it is Odey Asset Management's role to identify "corners of the market in the shade where a change at the enterprise or sector level can return a sector to favour and generate supernormal returns for investors". Ours is to protect clients from irrecoverable losses. For as the English economist, John Maynard Keynes, so eloquently put it "the market can stay irrational longer than investors can stay solvent".

CF ODEY OPUS FUND COMBINED WITH NZ FUNDS' CAPITAL PROTECTION STRATEGY



Source: Bloomberg.

Please note that the CF Odey Opus Fund is the retail international share strategy. NZ Funds accesses the Odey Allegra International Fund which is the wholesale international share strategy. The CF Odey Opus Fund has been used in the analysis on the previous page as it has a longer trach longertrack record.

ODEY ASSET MANAGEMENT

"I am happy to buy when faced with irrational fear, but the fear I see around me today appears reasonably rational"
- Crispin Odey (January 2009)

We are struck by the parallels between Crispin Odey and another investor born almost 100 years earlier – Jesse Livermore. With his mother's consent Livermore ran away from home to avoid a life of farm work. At the age of 15 he had amassed a small fortune by trading at illegal bucket shops where he was eventually banned for winning too much money. Livermore went on to make a larger fortune by correctly predicting the banking crisis of 1907 (as Crispin did 100 years later in 2007). But the most striking similarity is in the investment philosophy of these two men. Livermore's investment approach was documented in a series of interviews by Edwin Lefevre and published under the title 'Reminiscences of a Stock Operator'. In this 'Investment Insight' paper we discuss Crispin's approach.

On 24 October 1907 the New York Stock Exchange was on the brink of collapse. What started as a banking crisis had rapidly escalated into a nationwide economic meltdown. Livermore recalls there was not a single bid for any of the blue chip shares of the day such as Union Pacific, "Not at any price!". It was a day of days for Livermore who had correctly foreseen that share markets were overvalued and as such had amassed "an enormous paper profit" by short selling shares. But, having accumulated a fortune, he received a personal emissary from the president of the New York Stock Exchange, Mr R H Thomas, and a prominent banker of the time, Mr J P Morgan. Their message was simple. "The market can't stand much more pressure. As it is, it will be an immensely difficult task to avert a devastating panic… This is a case where a man has to work for the benefit of all." Without flinching, Livermore responded by saying "I not only will not sell any more stock today, but I am going in and will buy as much as I can carry". The market subsequently stabilised. Livermore (who might have earned considerably more had he continued his original course of action) recalled "my biggest winnings were not in dollars, but in intangibles… It was a day of days for me".

Crispin might have retired many years ago but, like Livermore, we believe it is the 'intangibles' that continue to motivate him.

By the early 1990s Crispin had established himself as a successful investment manager at Barings Bank. But, instead of enjoying his success, Crispin resigned, criticising the deskilling effects of indexation and the relentless asset gathering of the investment industry. Together with his settlements clerk, Simon Batten, Crispin founded Odey Asset Management in 1991. Today, Odey Asset Management manages over US$5 billion in assets from its Mayfair offices in London on behalf of private banks, wealthy individuals and a select number of institutions.

In late 2007 Crispin correctly identified that excessive risk taking and structural weaknesses within the banking sector had left it vulnerable to an economic slowdown. He aggressively sold banks and financial shares held by the Odey Allegra International Fund and sold banks short in his hedge fund. As a result, Crispin's portfolios performed exceptionally well in 2007 and 2008. In 2008 Crispin personally earned a small fortune – rivalling a second fortune of US$100 million that Livermore earned during the share market collapse in 1929.

Given what we know about Livermore, it should not surprise us to read that after successfully predicting the banking sector's collapse and just weeks following Crispin's reference to investors' fear as "reasonably rational", the headline appeared "Top UK hedge fund boss picks return of bull market" (New Zealand Herald 16 April 2009). Needless to say, while we will never know what motivated Crispin's abrupt change in outlook by the time the article was printed he had already bought heavily into banking shares including a formidable stake in Barclays Bank. The UK banking sector stabilised shortly thereafter and as a result the Odey Allegra International Fund rose 20.6% in April alone.

ODEY ALLEGRA INTERNATIONAL FUND

The Odey Allegra International Fund was launched in February 2007, although Crispin has been managing global shares for considerably longer via the retail-oriented CF Odey Opus Fund. The Odey Allegra International Fund has an investment objective of achieving long-term capital appreciation through investing predominantly in shares listed on one or more of the recognised global stock exchanges. The Fund is personally overseen by Crispin in his role as portfolio manager. It tends to have a European bias, in contrast to the US-centric portfolios of many investment managers.

The Fund may invest up to 35% of its assets in debt and debt-related securities (such as notes, preferred securities, debentures and fixed or floating-rate bonds). These must be listed or traded on one or more of the recognised stock exchanges worldwide and have a credit rating of at least A2 or P2 from Standard & Poor's and Moody's, respectively. In addition, the Fund can hold cash or cash equivalents depending on the prevailing market circumstances. When considered appropriate, the Fund may utilise techniques and instruments such as futures, options, share lending arrangements and forward currency contracts to reduce risk or costs, or to generate additional income.

INVESTMENT PROCESS: HEDGE FUND HERITAGE

"… think like an owner – see risk and opportunity through the eyes of the industrialist"
- Crispin Odey

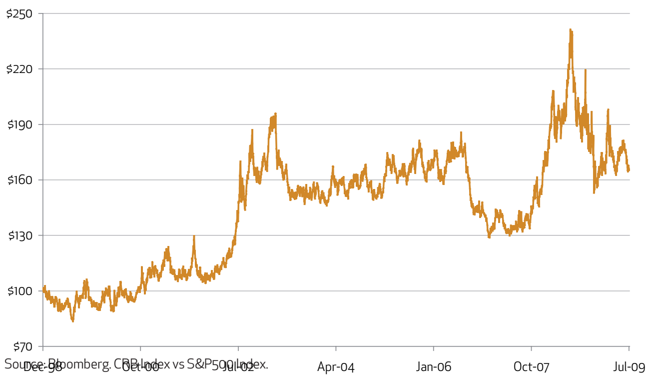
Odey Asset Management was established to focus on active investment management with an equal emphasis on preserving capital and generating superior returns. As performance fees are charged, the organisation's success primarily depends on investment returns and not asset gathering. The central strategy is Crispin's hedge fund. A hedge fund is an investment vehicle with the flexibility to own just about any asset or derivative in as large a quantity as counterparties will tolerate. But the hedge fund investment approach of preserving capital and seeking absolute returns (rather than relative-to-index returns) has also been successfully applied by Crispin to the management of traditional global share portfolios, of which the Odey Allegra International Fund is one.

Instead of constructing a share portfolio by first calculating a given security or sector's weight in the index and then deciding whether to own a fraction more or less than the index weight, Crispin's portfolio construction begins by thinking laterally. The largest driver of economic returns is the economy, or more specifically the business cycle. The latter includes not only objective measures of economic progress but also investors' emotional biases – be it fear or greed. The business cycle frequently overwhelms all else. As they like to say on Wall Street "a rising tide lifts all boats (shares)". The experience is the same on the downside. Just ask Buffet. After an unsuccessful foray into airline shares at the wrong point in the cycle, he ruefully remarked "When a management with a reputation for brilliance tackles a business with a reputation for bad economics, it is usually the reputation of the business that remains intact". Or as Livermore noted "The big money was not in the individual fluctuations but in the main movements – that is, not in reading the tape[1] but in sizing up the entire market and its trend".

Whether applied to asset classes, geographic regions or sectors, Crispin's portfolio construction starts by grappling with the business cycle. Crispin will often populate the portfolio with shares from sectors where an established trend of increasing value is present. Such a trend might last for many years. Here, Crispin is happy to let consensus prevail. This is often indicated by the strength of a share or sector relative to the rest of the market. Take the recent outperformance of commodities relative to shares and apply that theme to the share market. Crispin's ownership of Australian Agricultural Company, NZ Farming Systems Uruguay, Patriot Coal and Canadian Oil Sands Trust should come as no surprise.

(1) Before computers a 'ticker tape' machine was used to continuously stamp share prices and volume on a thin ribbon of paper. The term 'ticker tape' comes from the sound made by the machine as it prints.

COMMODITIES RELATIVE OUTPERFORMANCE OVER SHARES



Source: Bloomberg. CRB Index vs S&P500 Index.

But it is Crispin's skill at identifying a markedly different type of investment opportunity – also created by the business cycle – which has distinguished him from his peers. In Crispin's words "I have found that whatever the economic conditions, there are always corners of the market in the shade where a change at the enterprise or sector level can return a sector to favour and generate supernormal returns for investors". It is relatively easy to identify a company or sector that has fallen from grace and is now in the shade. Such a company's share chart will show an exponential rise in value, followed by a collapse – usually back to the foothills of the initial rise – and then a long period of consolidation. A long period of consolidation is often present but not essential. It depicts the entity's Darwinist struggle for survival during which employees are fired, jets sold, plants closed and competitors bankrupted. The art is in understanding what originally made the enterprise so valuable, what almost destroyed it and whether these factors are likely to reoccur. The reason for this is that when the positive features re-emerge, the now fundamentally stronger enterprise (what does not kill you makes you stronger) will once more rise exponentially in value. Tell-tale signs from this shady corner of the market include a management team with a vision of recovery, improving fundamentals (operating margin or return on capital) or improving market sentiment.

Take Premiere and BSkyB – two pay television providers in Crispin's portfolio. Both companies were at one time considered 'must own' growth shares by the establishment. BSkyB was valued at £25.9 billion and Premiere a more modest €1.3 billion. Today they languish at £9.9 billion and €0.7 billion, respectively. The key to pay television is sports content. The exclusive ownership of sports rights ensures high subscriber numbers which in turn generate high cash flows and enables the content owner to outbid competitors come renewal time, thereby perpetuating their dominance. This business model has been internationally validated. Examples include: BSkyB's ownership of the Premier League in England; Sogecable's stranglehold on La Liga in Spain; Premiere's loss (and subsequent re-win) of the Bundesliga in Germany; and, of course, Sky Network Television's dominance of the All Blacks in New Zealand. At some stage the growing free cash flow of these franchises will once more attract the attention of traditional investment managers, in which case their share prices may well revisit or exceed previous highs – between 85% and 160% higher.

PREMIERE SHARE PRICE

Source: Bloomberg.

BSKYB SHARE PRICE

Source: Bloomberg.

PORTFOLIO CONSTRUCTION: LONG-TERM INVESTING DEMANDS AN EQUAL EMPHASIS ON CAPITAL PRESERVATION AND CAPITAL APPRECIATION

Crispin broadens the risk of his focused approach by populating the Odey Allegra International Fund with a range of themes – each with a different profile, catalyst and probable outcome. Typically, the Fund will contain 5-10 themes and 50-100 shares. This ensures that it is highly liquid and places equal emphasis on the opportunity for capital appreciation and the importance of capital preservation. The Odey Allegra International Fund can invest in all regions and all currencies. As at May 2009 the Fund was approximately US$730 million in size. The Fund is exposed to the following themes:

ODEY ALLEGRA INTERNATIONAL FUND - CURRENT INVESTMENT THEMES

Theme	Allocation (%)
Banks, brokers and insurance	35.1%
Tourism, leisure & discretionary goods	10.2%
Agriculture	9.6%
Media	6.9%
Oil & coal	4.1%
Other	3.3%
Technology	2.4%
Healthcare	1.7%
Cash	26.6%

Source: Odey. Data as at 31 March 2009.

SECURITY ANALYSIS: SUCCESSFUL INVESTORS THINK LIKE OWNERS AND BASE DECISIONS ON ORIGINAL RESEARCH AND PRIMARY DATA

The investment industry is focused on pre-packaged investments. The more conventional a manager's security analysis is the better. Examples of pre-packaged investments abound – low P/E ratio shares, low price-to-book-value shares, high P/E ratio shares, high return-on-equity shares and, the dish of the day, high moat shares. Unfortunately, successful investing requires something different. If a valuation tool is easily calculable and widely adopted it is highly unlikely to generate a level of return different from the index – which for the vast majority of managers is perfect.

Great investments come through thinking differently: Jesse Livermore bet on the tape irrespective of the 'fundamentals'; George Soros captured mania and panic through his theory of reflexivity; Seth Klarman and Joel Greenblatt focused on everything pension funds were not allow to invest in; and, as American Express' share price plummeted, Warren Buffett sat behind the counter of his favourite steakhouse and counted the number of customers still happily using their American Express cards to pay and concluded it would be a great business to buy.

Crispin endeavours to think like an owner and has pioneered investment analysis that reflects this. Ben Graham accumulated a small fortune by focusing on the value of a company's assets, irrespective of its current earnings power. But in the modern world, Crispin noticed companies were becoming less and less asset intensive. The modern asset is the mind, but how do you analyse human capital? Perhaps one could divide the price of buying an entire company by the number of productive staff it employs? Would a company trading at $5,000 an employee – where those employees had the ability to earn the company $5,000 in profits per annum when the economy recovered – be a good investment?

Another investment tool which Crispin has consistently employed is structural change within an industry. Crispin has accumulated a US$8.3 million shareholding in Continental Airlines at a time when traditional measures such as P/E ratios and dividend yield would have pension fund trustees tut-tutting. But thanks to the 'Great Recession', airlines the world over are going out of business. When the global economy recovers, those still in business are likely to generate super-normal profits for years to come. Similarly, traditional UK banks like Barclays Bank (which represents 4.6% of Crispin's Odey Allegra International Fund) have seen their share of the loans market fall from 65% to 30% thanks to the meteoric rise of structured credit providers. Now that structured credit providers have crashed to the ground, should we not expect Barclays et al to pick up the slack and regain their lost market share? Meanwhile, because of the sharp reduction in competition, UK mortgage margins have quadrupled. This means that the recaptured market share is likely to be highly profitable.

RISK CONTROL: LIVING IN DENIAL MUST BE AVOIDED. IF AN INVESTMENT IS NOT WORKING, IT IS VITAL TO ACT QUICKLY

While Crispin's brave new venture Odey Asset Management met with initial success, the most formative experience came in 1994. In 1992 and 1993 Crispin delivered bumper returns, and by 1994 Odey Asset Management had over US$1 billion in assets under management. Crispin's initial success was almost followed by complete disaster. In 1994 Crispin accumulated a massive position in UK war loans in the belief that disinflation – a slowdown in the rate of inflation – would drive down interest rates. Ultimately Crispin was right but, in the interim, Crispin's hedge fund became hamstrung by the illiquidity of the position, leading to a 43% loss. Assets under management fell to only US$40 million.

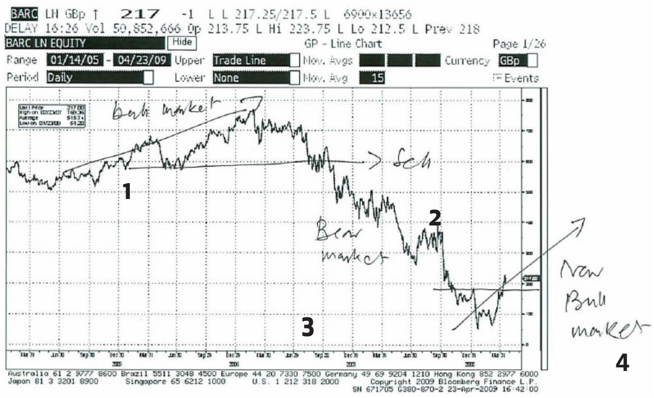
When reflecting on his success, Livermore wrote "There is nothing like losing everything you have in the world for teaching you what not to do. And when you know what not to do in order not to lose money, you begin to learn what to do in order to win. Did you get that? You begin to learn!"

What Crispin learnt was how to control risk. His tool kit is the chart – as the tape had been for Livermore a century earlier. Crispin is a master of acknowledging the psychology of the market through the use of relative and absolute strength charts. If a company is cheap, but its share price is falling, how can you justify ownership of it? Crispin is adept at selling now only to buy back later at a cheaper price when the share has stabilised.

Reacting to a change in share price momentum or new information requires flexibility of mind and a prepared portfolio. The lesson that Crispin took from 1994 is that liquidity is essential for capital preservation. Of the 66 shares in Crispin's Odey Allegra International Fund almost all could be sold within a day. Like Livermore before him, having learnt his lesson in 1994 Crispin applied it with aplomb in 2008, delivering his hedge fund clients a 55% return and outperforming the global share market by 12.1% with his Odey Allegra International Fund.

The share chart of Barclays Bank that follows was used by Crispin to successfully navigate the banking crisis.

CRISPIN'S INTERPRETATION OF BARCLAYS BANK PRICE CHART



1 = Bull market **2** = Sell **3** = Bear market **4** = New bull market

PERFORMANCE

The consistent outperformance of Crispin's international share funds relative to their benchmarks is made all the more remarkable when we consider the negative and positive extremes the market has witnessed since February 2007. Crispin prides himself on the fact that his strategy has outperformed share market benchmarks over the long term, with an exceptional performance record at points of market volatility.

ABSOLUTE RETURN ANALYSIS

Metric	Value
Average return (pa)	6.9%
Standard deviation (fund)	13.5%
Standard deviation (benchmark)	14.0%
Largest benchmark monthly decline	-10.9%
Fund return same month	-5.0%

Date prepared: March 2009.

RELATIVE TO INDEX RETURN ANALYSIS

Metric	Value
Excess return (pa)	8.7%
Tracking error	11.3%
Information ratio	77.0%
Beta	0.6
Alpha (beta adjusted)	6.0%
R-squared	44.5%

Date prepared: March 2009.

OUTLOOK

Odey joins a small group of extraordinary investment managers whose commercial interests are aligned with that of NZ Funds' clients, usually through being substantial shareholders in their own investment strategies. You will not find any random walkers or index huggers amongst our investment managers.

Success in life is as much about investment (in the broadest sense of the word) in people, as it is in companies. Livermore once remarked "The game does not change and neither does human nature". Consequently, this is an investment in the individual and not his company. And having observed Crispin and his investment process, we are in no doubt as to the outcome.