

Why asymmetric returns work

84

In this article we claim that what today is referred to as active management is really passive, as it uses the same risk management techniques as indexing (which is considered as passive management) and the same definition of risk (tracking risk) as do index funds. The distinction between passive and active long-only investment management is merely the magnitude of the tracking error constraint, ie, the pre-defined and accepted deviation from a market benchmark.

If risk management is passive, the return distribution of the managed portfolio will be similar to that of the underlying market benchmark. Our claim is simple: we believe that defining risk in absolute terms and managing risk accordingly, ie, trying to achieve an asymmetric return profile, is the future of asset management. An asymmetric return profile (at the most simplistic level: higher and larger positive returns, lower and fewer negative returns) is achieved through what we believe is active risk management.

Different investors can have different investment objectives that can result in different ways they define, perceive and subsequently manage and control risk. In a relative return context (essentially benchmarking and indexing), risk is defined, perceived and managed as tracking risk.

In the absolute return space (eg, hedge funds), risk is defined, perceived and managed as total risk. Risk management of the former is driven by a benchmark, while risk management of the latter by a P&L (profit and loss). Defining risk against an absolute yardstick (ie, capital depreciation) is different from the relative return approach, in the sense that the capital preservation function under the relative return approach is not part of the mandate.

Defining risk as tracking risk means that the risk-neutral position of the manager is the benchmark and risk is perceived as deviations from the benchmark. A benchmarked equity long-only manager (indexed or benchmarked to an index) moving, for example, into cash (yielding the risk-free rate) is increasing (tracking) risk as the probability of underperforming the benchmark increases.

In other words, the probability of meeting the return objective (to replicate or beat the index) declines – hence the perception of increased risk. In the absolute return space, the return objective is to generate sustainable absolute returns (positive compounding of capital) while the risk-neutral position is cash. A move from a long equities position into cash means reducing total risk as the probability of capital depreciation decreases.

Under the relative return model, the end investor is exposed to mood swings in the asset class in an uncontrolled fashion. Defining the return objective and risk management relative to an asset benchmark essentially means that the manager provides access (beta) to the asset class – that is, risk and return are nearly entirely explained by the underlying asset class. This means the investor is exposed (has access) to the asset class on the way up as well as on the way down.

Myopic investors have difficulties differentiating between exposure to uncontrolled and controlled total risk. Figure 1 compares what we believe is uncontrolled exposure to risk with controlled exposure

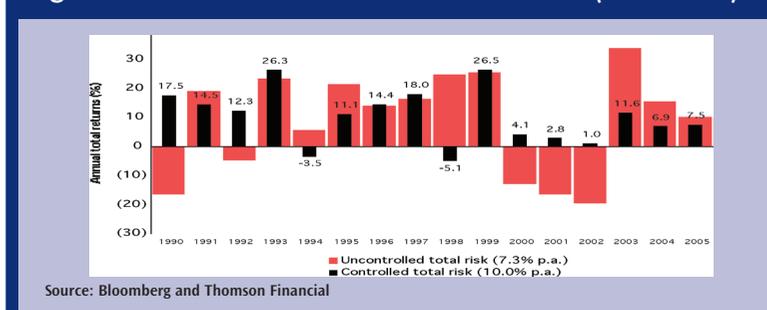
swings on both sides (positive as well as negative) and a lower compound rate of return. The compound annual rate of return, volatility and maximum 12-month drawdown for the MSCI World Index were 7.3%, 14.4% and –27.9%. Note that swings on the downside are not only larger but also more frequent.

Managing risk means protecting someone or something from an adverse impact. The discipline of protecting capital and wealth from adverse impact, we believe, is active risk management where risk is defined in absolute terms.

One assumption made in our assessment is that all investors prefer asymmetric returns over symmetric returns. This assumption is based on the following three notions which, we believe, are common to all investors. The first two notions are from Markowitz [1952, 1959] and the third from Kahneman and Tversky [1979]:

□ More return is preferred over

Figure 1: Controlled versus uncontrolled risk (1990-2005)



to risk. We believe managing total risk means having a higher compounding rate of return with lower downside risk. It is therefore not a big surprise that hedge funds have been on some investors' agenda since the equity market fell in 2000-02. Under market conditions showing a positive trend, the difference between controlled and uncontrolled total risk is somewhat difficult to spot (for the myopic and return-chasing investor by just examining returns, that is). Figure 1 compares the MSCI World Total Return Index (dividends reinvested) and the HFRI Fund of Funds Composite Index. We use the former as an example of uncontrolled, the latter as an example of actively controlled total risk:

□ **Controlled total risk:** Lower downside swings (and hence lower overall volatility) and a higher compound rate of return. The compound annual rate of return, volatility and maximum 12-month drawdown for the HFRI Fund of Funds Composite Index from 1990 to December 2005 were 10.0%, 5.5% and –6.6%. In Ineichen [2001], we called this risk/return profile to be the future of active investment management, as we believed (and still do) that all investors have positive utility from compounding capital and negative utility from absolute financial losses; especially large ones;

□ **Uncontrolled total risk:** Erratic

less;

□ Certainty is preferred over uncertainty;

□ Losses weigh stronger than profits, that is, disutility from capital depreciation is larger than utility from capital appreciation.

If a manager defines risk relative to a benchmark, the portfolio will mimic the return distribution of the underlying market benchmark. However, absolute return managers are not driven by market benchmark but by P&L. This means risk is defined in absolute terms (above we used the term "total risk"). If risk is defined as total risk and the investment process is driven by P&L, the manager will be taking into account these three factors.

The first factor (more return) is obvious. However, an absolute return manager, unlike a relative return manager, also manages the second and third of the three notions actively: first, most hedge funds have some sort of target risk (for example portfolio volatility or maximal drawdown at the 99% level) and control portfolio risk accordingly. Second, capital preservation is crucial, that is, avoiding large drawdowns is a major part of the objectives as well as the investment process.

Our angle (or bias) comes from looking at the world from what we believe is a risk management perspective. The bottom-up stock selection process of a long-only man-

ager and a long/short manager might be identical, or indeed very similar. However, we believe there is a big difference in the way risk is defined. If the definition of risk is different, it is obvious that the whole risk management process differs as a result. Managing tracking risk means participating in any boom/bust cycle unhedged, whereas managing total risk means reducing risk when the risk/return opportunity set changes to the investor's disadvantage. The investment philosophy and culture resulting from this differentiation could not be further apart. Indeed, we believe they could be considered opposites.

We believe that the purpose of risk management is asymmetric returns. By asymmetric returns we mean a return profile that is not available in "nature", but is artificially managed to meet the end investors' risk preferences more efficiently. Our belief is based on some assumptions of which an important one is that investors are loss averse, that is, volatility on the downside is not the same as volatility on the upside.

We believe that what we call a hedge fund today is really part of the risk management business. Given that most investors expect this decade to be less investor-friendly than the last, we could currently be witnessing the merger between what we referred to as the asset management industry and what we have come to understand to be the risk management business. One could go on and view this as a merger between the long-term (as in "equities outperform bonds in the long term") and the short term (as in "interim volatility matters"). The synthesis of the two would be, in its active form, managers seeking investment opportunities while managing total risk. In its more passive form, it entails structured investment products, ie, financial engineering. Given the (geopolitical) uncertainties of today, defining risk as tracking risk might one day be even considered as imprudent.

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