

The Real Market Risk Exposure of Long/Short Hedge Funds



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Despite a dismal reputation and rather poor average returns after fees (with the emphasis on average as, of course, there are exceptions), hedge funds continue to attract large capital inflows, including those funds which employ the most widely applied equity long/short strategies.

All investment strategies that are successful on a long-term basis have one thing in common: they are very good at judging and managing risks. This is, of course, what a hedge fund, as its name suggests, is supposed to do: to provide a hedge for investors. To hedge means to protect against potential losses that may be incurred on investment positions that the fund takes. With equity long/short funds, which are the focus of this article, this can be done in several ways, using a variety of financial instruments or offsetting different investment positions.

Managers of equity long/short funds often take an actual net long position and therefore the market risks, which are the risks primarily looked at here, are only to a certain extent offset by

their short positions or other instruments such as derivatives. One can thus ask the question, if the net long position of a fund is significant and thus the element of hedging is limited, should this really be called a hedge fund?

At the same time, most strategies employed by long/short hedge funds include leverage. To leverage means to invest using borrowed money, and, if successful, to retain the profit made. This requires increased attention on the risk management side, since things do not always turn out as anticipated. Besides the market not behaving in the way you want it to, simple mistakes may also happen on the operational side, such as errors in trading execution, although that is not the focus here. It is fundamentally not possible to hedge all the risks associated with leverage, so one must ask whether long/short hedge funds – which in reality are quite exposed to market risk by using leverage – are really able to hedge the inherent risks that leverage entails. Indeed, it seems that these funds tend to be exposed in a way that would pose a question mark over the use of the word “hedge”.

Short or long?

Long/short equity funds have a historical range of 35% to 40% net long. What does this mean? A long/short equity fund ought to go short (or take equivalent positions using financial instruments such as derivatives, which produce another set of risks) to offset their long positions. However, if a fund is, say, 40% net long, i.e. if almost half of the fund has exposure to market risk for the majority of the time, then it may be argued that the fund is essentially an equity long fund with an element of hedged market risk.

Probably a key reason why managers are afraid of going short is psychological. It is the fear of everyone else making money while they lose. If everyone loses in a bear market, it is not as problematic as the market going

up and the manager losing on their short positions while not making enough to compensate on their long positions: this is a worst-case scenario for a manager. Yet it is not much of a long/short equity hedge fund if the fund constantly has an actual significant net long exposure. It is rather a standard equity fund with a slightly lower beta, which is probably not what the end investor anticipated and would expect taking into account the high fees.

Strategies should adapt to changing market conditions

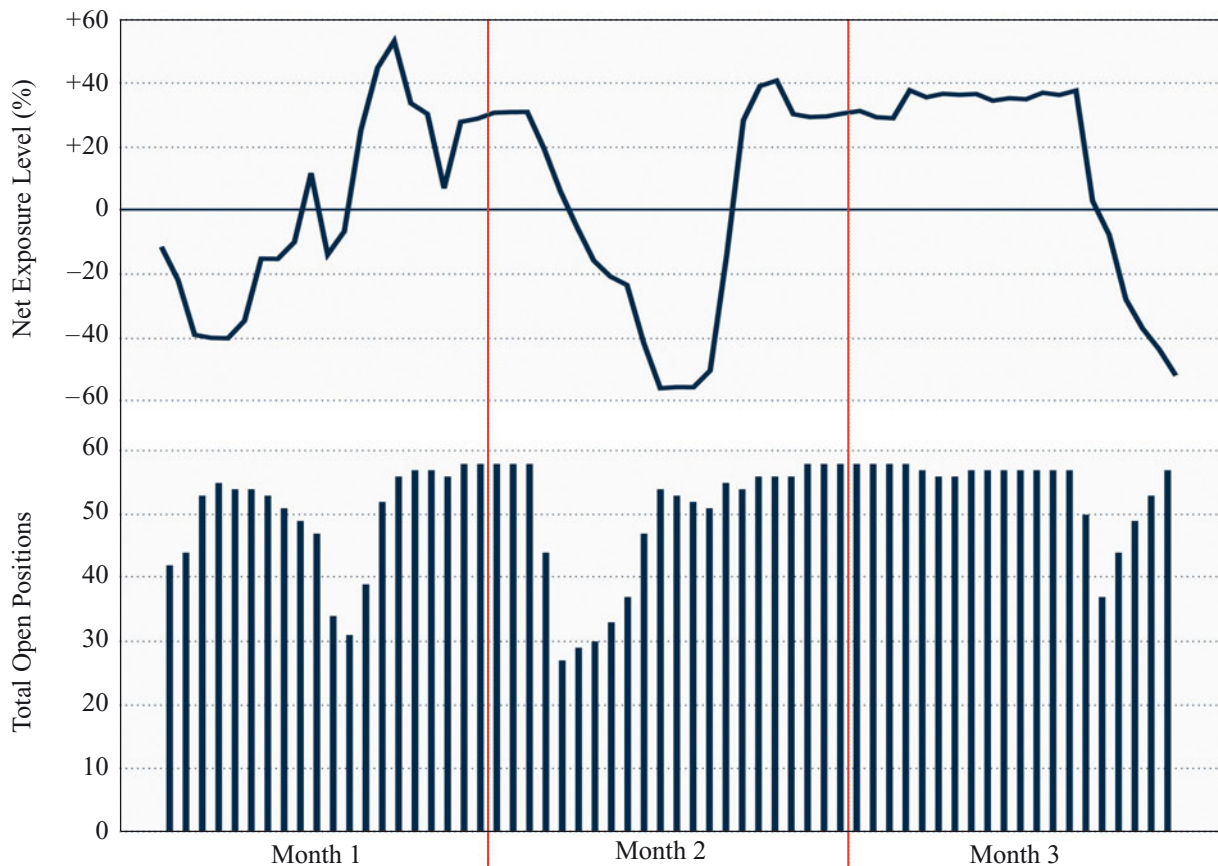
What is clear is that any long/short strategies that are to be successful over longer periods of time need to be able to adapt to changing market conditions. Alas, humans in general, and fund managers in particular, are usually reluctant to give up and change strategy as it can be seen as implying, both to themselves and to the outside world, that they may not really know what they are doing. A reality check is needed. As Churchill once said: “However beautiful the strategy, you should occasionally look at the results.”

Strategies should ideally be capable of adapting swiftly to changing market conditions, for example by going from net long to net short within a brief period of time. This long/short balance can be adjusted to maximize profit opportunities either by taking new positions or closing out existing positions (see illustration).

Leverage and the unknown unknowns

Leverage is a great tool to substantially increase your profits by investing money which you do not have. It allows you to keep the profit you make with that money, less the cost of borrowing it. Unfortunately, however, it can also work the other way round: rather than keeping a profit if successful, you may incur a loss on your principal or quite quickly end up losing your entire principal (or your shirt – a “blowup” in

Adjusting Long/Short Strategies



Long/short strategies should ideally be frequently adapted to changing market conditions and should also frequently be positioned net short, as illustrated in an example above.

hedge fund terms) and potentially owing money as a result.

Luckily for investment managers, there are now extremely sophisticated facilities and instruments available from a large range of financial institutions to mitigate many of the risks associated with using leverage; always provided, of course, that the financial system does not break down or that counterparties are unable to fulfill their obligations as we saw during the last financial crisis, culminating in the bankruptcy of Lehman Brothers in September 2008, the largest bankruptcy filing in American history. In any case, proper management of leverage requires additional attention to risk management, since occasionally things do not turn out as anticipated, and simple mistakes, both operational and in underlying theories, do happen.

It is inherently not possible to hedge all the risks associated with leverage, due to the fact that, at least

since Nassim Taleb's seminal work, *The Black Swan*, we should be well aware that the main problems we face here are exactly those "unknown unknowns". Now, of course, these phenomena also apply as a general rule if you do not use leverage. If you do use leverage, then the risk of losing everything (the "blowup") is much more likely than many fund managers would like to believe. As Taleb points out, a typical fund manager's definition of "risk" is likely to be a measure that excludes the possibility of Black Swans. The main problem is our ignorance with respect to randomness and our focus on what we do know. The largest risks do not lie with what we know, but with what we do not know, with the unknown. For this fundamental reason, using leverage is fundamentally a risky business, no matter how sophisticated the strategies are.

To my mind, the term "hedge fund" when applied to long/short equity

funds is something of a misnomer. Of course, equity long/short hedge funds never made the claim that they would hedge out all market risks all the time (that is something that the market neutral funds do) or that they would never blow up. Nevertheless, most long/short hedge funds are, in reality, more long than they are short and for most of the time use quite a bit of leverage – although much less so in recent years following the lessons learned in the last financial crisis. Both the net long exposure and the use of leverage actually lead to significant market risk exposure for such long/short strategies.

This market risk exposure is fundamentally impossible to properly manage and certainly not to the extent that the word "hedge" would actually suggest in the real sense of the word.

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