

Bluff your way into hedge funds

(And learn a thing or two along the way)

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Introduction

Investment in hedge funds has reached around \$1,000 billion (1 trillion) around the world, managed by over 7,000 funds. Although this is just 8.5% of mutual fund capital, estimated by Khorana et al. (2005) to be around \$11.7 trillion, it is nothing compared to the media attention that hedge funds get. This has two reasons: first, hedge funds can use the most aggressive type of trades and use that freedom to engage in risky and/or exotic trades that they like. Likewise, given the high rewards that HF managers negotiate for themselves, the HF industry attracts the smartest and brightest asset managers. Second, since they only have mild reporting requirements, it is unclear in what way they actually make money. Add to this the fantastic ways in which some hedge funds go bust, accusations by politicians that hedge funds are like vultures, and we have all the ingredients for a sustained media focus.

In this short article, my aim is to share some basic knowledge of hedge funds and the most basic academic insights, so you just might bluff your way into hedge funds...

Why are they called "hedge funds"?

This is a tricky question: I've seen students that write something like 'Hedge funds are a safe investment because they *hedge* the risk of investing.' And yes, one is easily fooled by the name they have been given.

Simple answer: hedge funds can actually be extremely risky, but the industry just needs a term to give these funds to set them apart from plain-old mutual funds. The name 'mutual' doesn't sound very dynamic does it? Compare it to the master-stroke of marketing by investment banks to call third-world countries 'emerging markets'.

For the curious of mind: in the 1940's, Alfred Winslow Jones called his fund a hedge fund, because his aim was to hedge away *systematic risk*. Yes, remember that term, and hold on: if you start with \$10 mln and buy all the stocks in the S&P 500, the residual exposure to movements in individual stocks is extremely small: you have diversified away the risks of individual stocks. The only risk left is the market risk, i.e., fluctuations in the economic environment that affect all stocks in a large or small degree.

What Jones' fund did was the exact opposite: he looked for stocks in the same industry, with one stock seemingly overvalued relative to the other. Then, by shorting the overvalued stock, and buying the undervalued stock, he would make a profit if the stock prices of these two securities moved in each other's direction. By doing this, he just got rid

of the systematic risk: market factors that affect both securities do not influence his pay-off. Hence, he had hedged the systematic risk of the investment.

If you only understand it with a picture: Look at Figure 1, where I plot the stock prices (base 100 on Nov. 1, 2005) of Google, eBay as well as the NASDAQ index. You can see that both stocks move with the NASDAQ, which is obvious, since they are technology stocks. Whatever a long-only tech-investor does, he will always have some exposure to the movement of the NASDAQ. But now a hedge fund investor closely studies Google and eBay, and, on Nov. 1st 2005, decides that Google is undervalued relative to eBay. The hedge fund will short eBay, buy Google, and the result is ... a pay-off that is not typically related to the NASDAQ return.

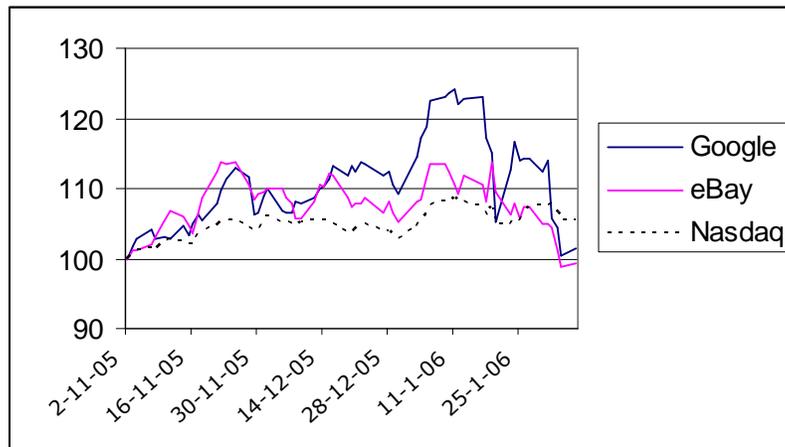


Figure 1: Google, eBay and the NASDAQ.

Looking at Figure 1, one can see that it is not a strategy without risk: in the beginning Google underperforms eBay, outperforming at the start of 2006, but ending on par with eBay on February 7. However, since the risk is not systematic, hedge funds playing this game can offer a seemingly attractive risk-profile to institutional investors.

For the interested reader: read Goetzmann and Ross (2000), who explain how, using the CAPM model, hedge funds can be so popular while still employing risky strategies. The CAPM model is all about identifying systematic risk, so start there if you are serious.

Can anyone just invest in a hedge fund?

Since everybody is so hot about it, this is certainly a relevant question. Can banks and personal financial planners just advise their clients to join in this party of money makers?

Simple answer: No. Hedge funds are given so much freedom because they limit the number of investors, and only allow high net-worth individuals or institutions are participants. Does that sound like someone like yourself?

Eclectic answer: Yes and no, it depends. New hedge funds are started everyday, so you can probably get into a hedge fund even if you are not a millionaire. Also, the maximum number of investors allowed has been increased from 99 in the beginning to currently 500. However, a more serious problem is that the good funds might not want your money. Unbelievable it sounds, the idea is that hedge funds are so specialized in a particular

strategy or niche that they cannot just scale up their operations to any desired level. Therefore, quite a large number of hedge funds is just closed for new investors. By the way, banks are nowadays selling hedge funds to low net-worth individuals. I don't know how they do it, but it probably involves 'fund of funds', which is a synonym for 'cost of costs', i.e., you get all the costs while the benefits are a bit shady...

What's with the funny names like 'Global Macro', 'Short-selling', etc.?

Be prepared when hedge fund returns are presented, to see the results split out to the different strategies. What strategies are there, and what do funds in such a strategy do?

Before we start, note that fund managers pick one of the available names to describe their strategy themselves. Individual funds might just be following a somewhat different strategy, a completely different strategy, or a mix of strategies. If we have to believe insiders in the industry, the latter is actually relevant: hedge fund managers sometimes change strategies, just to stay in the game.

Convertible arbitrage: Buy a convertible bond that you think is underpriced, short the underlying stock, and make a profit at conversion if you're right.

Short-selling (also called: dedicated short bias): Shorting boils down to selling a security you don't own. That means you have to buy it at some time in the future. If the price has declined at that time, you make a handsome profit. If not, you lose money in having to buy the at the higher price than for which you sold it.

Funny story: Some time ago the largest Dutch pension fund, ABP, temporarily stopped lending shares to hedge funds (which they need to sell short), claiming that short-sellers had a bad effect on the market. But at the same time, ABP had a significant hedge fund investment.

Scary story: if a number of hedge funds has a short position in the same security and the price starts to rise unexpectedly, everybody might want to get out at the same time, by buying the stock. This panic reaction can push up prices quickly and is called a 'short-squeeze'. And there is a pro-active component to this term: Other investors may attempt a short squeeze, driving prices higher to force short sellers to cut their losses.

Event-driven: This strategy has to do with major 'events' that impact the price of a stock or bond, such as restructurings, (near) bankruptcy, merger announcements, etc. You can profit from an event by betting on the outcome: if you think the event at hand will result in a higher stock price, you buy the stock. Otherwise, you short it.

Market neutral: do something that has little systematic risk, as explained above.

Fixed-income arbitrage: profit from differences in interest rates. This was a strategy used by LTCM on a giant scale. Since fixed-income markets are very competitive, this strategy is also called: "picking up nickels in front of a steamroller".

Long/short equity: Go short and long in stocks where you see fit.

Emerging markets: invest in specialists that know something about underdeveloped countries.

Global Macro: invest around the world in 80 days.

Managed Futures: you can manage your future if you are smart at trading in futures.

(sorry for the cheap jokes, but one easily gets tired by typing an elaborate description of the above strategies).

Why are so many new hedge funds started?

According to the Economist, in 2004, 400 new hedge funds have been started, as registered by Hedge Fund Research. This raises the question why this is happening.

Simple answer: It's the money. A typical hedge fund charges a yearly baseline fee of 1% of assets, plus 20% of the return (correcting for previous losses, see below).

Asset managers at an investment bank can make a decent living. But what if you think that your skills are better than those of your colleagues? By starting a hedge fund (using a few good contacts from your former employer and possibly getting an initial investment to go with it), you can be your own fund manager, and make a lot of money.

Are these enormous fees justified?

The management fee of a hedge will typically look like a 1% per year baseline fee of assets, and 20% per year of the profits that exceed a certain moving threshold. This moving threshold is called the 'high-water mark', and moves up with either the risk-free rate, or the return on assets. This way, you don't have to pay 20% of a return that was just making up for a lousy previous year. This helps a bit, but still, 20% is a large percentage of a gross return. The jury's still out on how much hedge fund returns *net of fees* are worth for the average investor. But we have to give an answer, so here it is:

Simple answer: Measured against a relevant benchmark, they do not, in general, deliver a better return than the market. However, they can help in improving the risk profile of an existing (large) portfolio.

Academic answer: Some funds, during some periods, deliver exceptional returns. However, Amin and Kat (2003) find that for the years 1990-2000, a standalone hedge fund investment was not profitable if you correct for risk.

But a distinctive property of hedge funds is that the returns they generate have a different risk profile than a traditional investment. First, hedge fund returns seem to have a 'fat tail': the odds of having a large negative return are much larger than for a comparable equity investment. Second, measured against traditional benchmarks, they have low systematic risk, having little correlation with traditional asset classes such as stocks and bonds. Both effects give hedge funds a certain usefulness in a portfolio context, so Amin and Kat find that it does make sense to add a 10% to 20% hedge fund investment to a diversified portfolio of stocks.

Do hedge funds really have low systematic risk?

Two articles criticize the notion that hedge funds are so special. First, Jensen and Rotenberg (2004) show that hedge fund index-returns for the different styles can be easily replicated by naive strategies that require no skill. For example, the strategy of just buying into every M&A announcement you see in the newspaper gives a high correlation with the 'M&A arbitrage' hedge fund style return, and outperforming it at the same time.

Second, Asness et al. (2001) show that adding other factors when evaluating hedge funds returns, such as the lagged S&P500 return, increases systematic risk and decreases excess performance of hedge funds.

What's with the biases?

The hedge fund literature mentions a number of biases that are relevant when doing statistics on hedge fund returns. I give the two most important ones:

- survivorship bias: if someone reports the return of hedge funds over the period 2000 – 2005, they are probably using only the funds that exist in the whole 5-year period. But that overstates the actual returns, because the funds that go bankrupt in between are left out.
- backfill bias: to be included in any serious database of hedge fund returns, like that of Hedgefund Research, or CSFB/Tremont, you need at least, say, 2 years of returns. But that means that funds that go bankrupt in the first two years are not included in any database, overstating the return that the average hedge fund investor receives (and who might invest in a 1-year old hedge fund).

Do hedge funds destabilize financial markets!

This is a complaint heard often, especially in political circles whenever a hedge fund is thought to have been of influence in security prices. Is it true that hedge funds have a bad influence on financial markets?

Simple answer: they don't, but sometimes they're just an easy-to-blame target

Academic answer: In one particular case, the Malaysian prime minister Mahathir attributed the crash of the Malaysian Ringgit to hedge funds, whom he called "Highwaymen of the Global Economy" (WSJ, 23 sept. 1997). However, Brown et al. (1997) analyzed a few major hedge funds that were investing in the region at that time. They find that the hedge funds did not have any unusual positions in the Ringgit, and some even lost money during the event. So, it rather seems that the Malaysian prime minister needed an easy target to blame for the demise of his currency, which had probably a lot to do with his own (economic) policies.

On the other hand, Brunnermeier and Nagel (2003) show that hedge funds were 'riding the bubble' during the technology bubble at the end of the 1990s. Just as everybody else, they invested heavily in the (overpriced) technology stocks of that time. However, they were much quicker in reducing their exposure to the IT stocks. So, one could say that hedge funds helped a little to inflate the IT bubble (although they've led the way in exiting the overpriced stocks.)

By the way, although quite a lot of money is invested in hedge funds in absolute terms (\$1 trillion), it is a tiny drop compared to the total size of financial markets worldwide. The size of the market for primary securities in their national markets is estimated by Khorana et al. (2006) to be around \$70 trillion, so hedge funds make up only 1.4% of that.

To end the story with a plague

In Germany, the Children's Investment fund (TCI) led a shareholder revolt to get rid of the bosses of Deutsche-Börse, Rolf Breuer and Werner Seifert. Deutsche-Börse had a controversial plan to bid for the London Stock Exchange (LSE), and a number of large shareholders thought this would decrease shareholder value. However, the reaction of German politicians was remarkable. I don't know how well connected the two gentlemen were, but it is quite remarkable to hear left-wing politicians, such as the SPD chairman Müntefering say that hedge funds are like a plague of locusts ('Heuschrecken', NL: sprinkhanen), "that descend on companies, chew them up and move on" (Corpwatch, May 11th 2005). But TCI is a hedge fund that makes money in a perfectly legal manner, while 0.5% of assets under management are donated to a charity (run by the owner's wife) that helps children in third world countries (hence the name). What better example of left-wing capitalism?

Interesting: TCI is a \$5 billion British hedge fund managed by Christopher Hohn that just won the title 'best European hedge fund' for the second time in a row. Its return was 50% over 2005 and 40% over 2004. And I don't know what it means when Businessweek writes "Hohn has retained attorney and Christian Democratic politician Friedrich Merz to represent TCI in Germany", but it sure shows that politicians are circling around hedge funds.

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