Hunting for Alpha Hunters in the Currency Jungle

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When equity markets are churning out double digit returns and fixed income markets offer normal yields or declining rates, institutional investors can be somewhat relaxed. They can earn reasonable absolute returns with conventional strategies. "Beta grazing" goes a long way without much need to look for exotica.¹ Put differently, when traditional assets are likely to provide reasonable returns, the need for so called alternatives is less urgent. But when expected returns in equity markets seem slight and fixed income has been overrun by scared rabbits looking for safety or a small yield-to-maturity, things are different. What should institutional investors do to satisfy their need for more acceptable absolute rates of return?² In such an environment, the marginal contribution of alpha hunting is far greater. It goes beyond the desire to diversity into the necessity to earn a critical level of absolute return.

Recently Perold (2011) analyzed the dilemma of institutional investors in the current low real return environment. Perold offered four choices: accept a decline in future purchasing power, lower current spending, take greater equity risk, or seek alpha through greater active

¹ Leibowitz (2005) introduced the terms "beta grazers" and "alpha hunters". While both alpha hunters and beta grazers endeavor to earn investment returns, there is a considerable philosophical divide between the two groups. Beta grazers aim to earn returns by collecting risk premium. Alpha hunters seek to exploit market inefficiencies and behavioral biases.

² Pension funds typically need a 7-8% annual return to cover future liabilities. Endowments typically spend around 5% of endowment assets annually.

management. We elaborate specifically on the last option by focusing on how and where to look for alpha hunters. Our view is based on research for the book "Currency Management in the Post-Crash Era" (Pojarliev and Levich, 2012).

Do Alpha Hunters Really Exist?

During the recent financial crisis, many hedge funds delivered negative returns. Investors discovered that they were less diversified than expected. As Leibowitz (2011) observed, despite the fact that most institutional investors held diversified allocations spanning a variety of asset classes, some level of implicit equity exposure lurks in virtually every asset. In other words, some of the presumed alpha hunters turned out to be beta grazers.³ This experience has prompted some investors to question the existence of real alpha generators. Do they really exist, or is every alpha hunter just a disguised beta grazer?

Many investors doubt the value of active management. Research shows that the average fund manager fails to outperform. After fees and transaction costs, the average alpha is negative. However, these results apply on average and not to a specific fund or manager. Indeed, some active managers have generated statistically and economically significant return for their clients. The investment success of these "stars" cannot be explained by pure luck and it seems that they operate in various markets.

³ Note that beta grazers have an economic reason to pretend to be alpha hunters. Alpha hunting is far more challenging and justifies higher fees. When a beta grazer disguises himself as an alpha hunter, he reaps the economic benefit of charging "hunting fees" for grazing.

How to Hunt the Alpha Hunters?

Given their value and relative scarcity, it is no surprise that identifying alpha hunters is not an easy task. While all marketing disclaimers state that past performance is not an indication of future performance, past alpha generators are a good place to start when looking for investment stars. However, as in many empirical studies of asset return performance, the nature of the data can have a significant impact on results and inferences. Marketing materials often confuse back-tested (simulated) performance with a real track record. Hedge fund databases suffer from numerous biases, which can skew the results enormously. In self-reported data common in many hedge fund studies, backfill and survivorship bias can be severe. In other words, not all track records are created equal. Investors should pay closer attention to the nature of the performance data when assessing managers. Fortunately, the existence of hedge fund platforms allows collecting return data not contaminated by the usual biases.

The performance track record of the real alpha hunters should have low correlation to risk factors. Put differently, the R-square of a multi-factor model aiming to explain the return of the manager should be low. To better illustrate the difference between an alpha hunter and a beta grazer, Table 1 summarizes the results for two currency managers who are on opposite ends of the alpha-beta continuum.⁴ On the surface, manager #1 (M1) and manager #2 (M2) seem quite similar. They earned similar excess returns of 3.70% and 3.02% per annum respectively over 6 years, and their information ratios (IR, or ratio of excess return to standard deviation of returns) were nearly identical, 0.74 and 0.78 respectively.

⁴ This example is based on Pojarliev and Levich (2008). The authors apply a four factor model to 34 currency managers to estimate what portion of the return is due to exposure risk factors (or beta), and what portion is due to skill, or alpha.

However, manager M1's returns are tightly linked to basic systematic risk factors that represent "beta returns." With a high R-square of 69%, M1 fits the profile of a beta grazer. After accounting for these returns, the intercept (or alpha) for M1 is actually negative 2.48% per annum, although not significantly different from zero. The calculations for manager M2, on the other hand, show no significant relationship to any of the 4 factors and the R-square is only 3%, making M2 an alpha hunter. The alpha for M2 is positive 3.51% per annum and significantly larger than zero. M2 is earning "true" excess returns and could be classified as an alpha generator, meaning a successful alpha hunter. An alternative information ratio, IR*, calculated as "true" alpha divided by its standard deviation yields 0.93 for M2 and -0.52 for M1. Clearly M2 ranks higher by this alternative criterion. Not surprisingly, Titman and Tiu (2011) find that hedge funds that exhibit lower R-squares with respect to systematic risk factors have higher Sharpe ratios, higher information ratios, could demand higher fees and attract more future inflows.

Table 1: Alpha Hunters and Beta Grazers

	Annualized	Annualized	Carry	Trend	Value	Volatility	R	IR	IR*
	Excess Return	Alpha	Beta	Beta	Beta	Beta	Square		
M1	3.70%	-2.48%	2.27	0.90	0.33	0.37	0.69	0.74	-0.52
		(-1.12)	(5.40)	(6.98)	(0.32)	(2.14)			
M2	3.02%	3.51%	-0.07	-0.00	-0.19	0.16	0.03	0.78	0.93
		(2.02)	(-0.23)	(-0.06)	(-0.23)	(1.17)			

Source: Pojarliev and Levich (2008). Based on 72 monthly observations covering 2001-06 for each manager. T-values in parentheses. Boldface indicates statistical significance at 5%.

Of course, while performance is a necessary criterion to gauge investment success, a rigorous due diligence process must accompany the manager selection process. An alpha hunter is not necessarily an alpha generator as managers hunting for returns away from the simple, standard trading strategies might fail to perform well. Correspondingly, a beta grazer could still deliver positive alpha. However, only part of his return is due to skill and another part is due to exposure to risk factors.

Alpha Hunters in the Currency Jungle

The list of the successful alpha hunters is not long (see Leibowitz 2005), as if alpha hunters were an endangered species. So it is not surprising that once a successful alpha hunter is identified, he (or she) attracts a large amount of assets under management. That makes the hedge fund industry susceptible to concentration with large hedge funds attracting the bulk of new capital and some successful hedge funds closed for new investors or returning capital to current investors. As a consequence, investors might benefit by searching for alpha hunters in overlooked market segments, like the currency market. Indeed, despite the debt and liquidity of the FX market, where a BIS survey in 2010 estimated daily market turnover at close to \$4 trillion, it seems that currencies as an alpha source are still largely ignored.⁵

⁵ There are two basic types of currency investment mandates. In an absolute return mandate, the investor seeks to earn a positive return, usually in excess of some benchmark (alpha), and subject to acceptable risk levels. With a currency overlay mandate, on the other hand, the investor already owns a portfolio of foreign debt or equity and the objective of the mandate is either to entirely eliminate currency risk from the portfolio, or only partially reduce currency risk while opportunistically going after return.

While the landscape of active currency management has changed dramatically over the last 25 years, following Black's seminal article on universal hedging (see Black 1989) investors have focused predominantly on hedging and less on using currencies as a source of alpha.⁶ Currencies are often viewed as an unwanted by-product of international diversification. Indeed, AUM in currency hedge funds remains a tiny fraction of the whole hedge fund industry.⁷

Explanations for why currency remains a niche market are not hard to find. Institutional investors may harbor realistic doubts regarding the suitability of currency as an asset class. Currency markets are highly specialized with terminology and institutional features that differ from equity trading on organized exchanges. Concerns regarding the elusive nature of currency valuation and trading relationships make some wonder whether it makes sense to rely on currency as a perpetual source of return compared to "real investments" like stocks, bonds, or even commodities and precious metals with alternative industrial uses. That currency trading is lightly regulated and prone to central bank intervention may seem to layer on additional risks. Furthermore, since the AUM at most currency managers is relatively small relative to the size of most institutional investors, plan sponsors find it difficult to allocate to FX managers.⁸

⁶ Currency overlay firms like to use "zero return high risk" proposition to sell their hedging services.

⁷ BarclayHedge estimates that AUM at currency funds is roughly \$28 billion while Hedge Fund Research estimates AUM at all hedge funds is close to \$2 trillion, indicating that professional currency managers account for less than 2% of the hedge fund industry despite the substantial size and liquidity of the foreign exchange market. Note that we are referring to stand alone currency mandates. Currency strategies are also actively used by many global macro hedge funds that enjoyed similar growth as the general hedge fund industry.

⁸ Based on the 115 managers who reported AUM to BarclayHedge in January 2010, 86 (or about 75%) managed AUM less than \$100mn and only 10 (less than 10%) reported AUM in excess of \$500mn. As a rule of thumb, institutional investors avoid allocating to managers in excess of 1/3 of the manager's total AUM. For example, if a currency manager has only \$100mn total AUM, an institutional investor would rarely allocate more than \$35mn, which could be too small of a size a) to have an impact on his overall portfolio and b) to justify the costs for initial and on-going due diligence.

Another important challenge for institutional investors is to identify appropriate benchmarks to gauge the performance of currency managers. Without appropriate benchmarks, gauging whether managers have demonstrated true skill or not can remain in doubt. The lack of well-established benchmarks may be one of the primary reasons why allocations to currency strategies remain very low compared to hedge funds in general.⁹

The bottom line question is this: "Do currency managers deserve to have a place in an institutional portfolio as an alpha provider?" Based on our research, the answer to this question is in most cases "yes" and the reasons are threefold. First, various established currency trading strategies have tended to produce returns, which can be proxied as style or risk factors and have the nature of beta returns.¹⁰ These returns tend to be imperfectly correlated with traditional equity market returns. Second, even if a more demanding expected return benchmark is used, some currency managers produce alpha, and persistence of both alpha and beta style currency returns heightens the appeal of the currency asset class. And finally, the global currency market offers enormous liquidity and continued to function uninterrupted throughout the depths of the Global Financial Crisis.

⁹ By comparison, the development of numerous indices tracking small cap stocks, value, emerging markets, geographic regions, and industry sectors not to mention the various asset categories within fixed income and the term structure by vendors like S&P, MSCI, Barclays, Russell, and others have allowed niche institutional managers to flourish in these specialized asset categories.

¹⁰ Three basic trading strategies (carry, trend and value) and the volatility of the FX market explain the bulk of the returns generated by professional currency managers. The carry strategy is a bet that higher yielding currencies will not depreciate enough against low yielding currencies to outweigh the interest rate differential. Trend strategies bet that currencies which appreciated most in the past will continue to do so in the future. Value strategies involve buying undervalued currencies and selling overvalued currencies with "fair" value determined by macro-economic variables.

We qualified our answer with "in most cases" because some institutional investors might lack the governing structure for proper due diligence to allocate to stand alone currency managers. In these cases exposure to currency alpha might be obtained through a currency Fund of Funds and exposure to currency beta through currency ETFs. Other institutional investors might prefer to gain exposure to currency alpha through allocations to global macro funds, which employ currency investment strategies. However, in most cases the currency alpha generated by these macro funds cannot be separated from the total alpha generated. Therefore, it is often impossible to evaluate if the specialists (FX-only managers) outperform or underperform the generalists (global macro funds). In any case, the question about the choice between boutiques and supermarkets is not confined to currency management and is behind the scope of our essay.

Acknowledging that currency markets are different than other asset classes, institutional managers need to incorporate a few new steps in order to add a currency mandate to their overall investment strategy.

• <u>Collect return data on currency managers</u>

While all declaimers state that past performance is not an indication for future performance Pojarliev and Levich (2012) report alpha and beta persistence for professional currency managers. Hence, part performance data could be utilized to differentiate between alpha hunters and beta grazers.¹¹

¹¹ We caution against the use of databases with self-reported return. Fortunately, there exist many FX-only hedge fund platforms which allow potential investors to evaluate manager's track records. For example, Deutsche Bank launched dbSelect in March 2005. More recently, both Citibank and Morgan Stanly have also developed FX-only platforms.

• <u>Identify the alpha generators</u>

The four factor model proposed by Pojarliev and Levich (2008) can then be used to group managers into alpha generators, alpha hunters, beta grazers and underperformers. Managers with high alpha are alpha generators and managers with low alpha are underperformers. Managers with high R-squares are beta grazers and managers with low R-Squares are alpha hunters. While this classification can be constructed in-sample, empirical evidence suggests that these broad categories are likely to persist out of sample.

<u>Allocate to the alpha generators</u>

A final step involves setting up the parameters of the currency mandate and dealing with the structural and operational choices. For example, absolute currency mandates could be tailored to different level of risk aversion. This could involve agreeing on maximum monthly drawdown, or target volatility.

Of course, our brief outline of a simple three-step process is only a small part of the duediligence process required to identify suitable managers. However, adding these steps to an existing manager selection approach is likely to provide value in determining the currency managers most likely to benefit institutional portfolios.

Conclusions

The Global Financial Crisis prompted investors to rethink asset allocation. The investment management industry responded by offering a variety of new products, for example insurance against equity tail risk, tail-hedging products and alternative approaches for asset

9

allocation like risk factors based asset allocation and risk parity. These new products are unlikely to solve the conundrum of low beta returns and higher required absolute returns. Instead, investors should focus on the traditional approach for asset allocation where the bulk of the assets (the core) is invested in long-only managers (beta grazers) and a small proportion of assets is invested in satellites (alpha hunters). Our research suggests that currency is an under utilized asset class where new beta grazers and alpha hunters can be identified and added to the traditional approach.

In an investment world where beta returns might be too low, alpha hunters are needed more than ever. But obtaining exposure to successful alpha hunters is less straightforward that it seems. First, many beta grazers are tempted to disguise themselves as alpha hunters so that they can reap the economic benefits of charging active fees for passive management. Investors should look for managers who exhibit lower R-Squares with respect to systematic risk factors. Second, not every alpha hunter will necessary succeed to deliver positive alpha. A rigorous due diligence process must accompany the manager selection process. Third, the celebrity status of some alpha hunters has attracted so much institutional capital, raising the question of capacity constraints for certain investment strategies. Investors might benefit by hunting for alpha hunters in overlooked market segments. The currency jungle seems like a fruitful place to start looking more closely.

References

Black, F. 1989. "Universal Hedging: Optimizing Currency Risk and Reward in International Equity Portfolios," *Financial Analysts Journal*, vol. 45, no. 4 (Jul/Aug): 16-22.

Leibowitz, M. 2005. "Alpha Hunters and Beta Grazers," *Financial Analysts Journal*, vol. 61, no. 5 (September/October): 32-39.

Leibowitz, M. 2011. "Alpha Orbits," *Financial Analysts Journal*, (July/August), Vol. 67, No.4 (July/August): 4-7.

Perold (2011) "Negative Real Interest Rates: The Conundrum for Investment and Spending Policies," *Financial Analysts Journal*, vol. 68, no. 2 (March/April): 6-12.

Pojarliev, M. and R.M. Levich. 2008. "Do Professional Currency Managers Beat the Benchmark?" *Financial Analysts Journal*, vol. 64, no. 5 (September/October): 18-32.

Pojarliev, M. and R.M. Levich. 2012. "Currency Management in the Post-Crash Era," CFA Research Foundation, *forthcoming*.

Titman, S. and C. Tiu. 2011. "Do the Best Hedge Funds Hedge?" *The Review of Financial Studies*, vol. 24, issue 1, pp. 123-168.