May 2016 Investment Publications Highlights

Crystallization: A Hidden Dimension of CTA Fees

Gert Elaut, Michael Frömel, and John Sjödin, *Financial Analysts Journal*, vol. 71, no. 4 (July/August 2015): 51–62

Investors have increasingly become aware that headline fees impact long-term returns, but there are some lesser known aspects to fee structures that also play a pivotal role. The authors examine the frequency with which a fund charges incentive fees and updates its high-water mark, determining that the total fees charged to investors increase when incentive fees are more frequently crystallized.

The authors review a sample of 1,616 hedge funds, specifically those registered as commodity trading advisors (CTAs), finding that in a majority of cases incentive fees are calculated on a quarterly basis, in contrast to a long-held belief that hedge funds typically charge annually. Using this data, the authors estimate gross returns based on the funds' headline fees. They then examine the average annual fee load investors pay for different crystallization frequencies, assuming a 2% management fee and 20% incentive fee structure.

Their findings indicate that hedge fund investors' expected total fee load increases with the crystallization frequency. Focusing on just a one-year horizon, CTAs in the assumed 2 & 20 fee structure pay 49 bps more in fees if the crystallization period is quarterly rather than annually. The performance drag increases to 82 bps a year if incentive fees are paid monthly. The authors also find that as the investment horizon increases, the difference in fee loads decreases. For instance, over a five-year horizon, investors in hedge funds with quarterly crystallization periods pay 22 bps more in fees than they would for funds with annual crystallization periods. The authors argue that this is the result of longer investment horizons having a higher likelihood of a period of negative performance when no incentive fees are paid.

To conclude their study, the authors emphasize that changes in crystallization frequencies lead to material changes in the total fees paid by investors. Their work suggests that a monthly calculation of a 15% incentive fee is roughly equal to an annual calculation of 20%. Although investors should pay close attention to a hedge fund's headline fee structure, they should also have a firm understanding of other important details, particularly the frequency with which an incentive fee is charged.

Fees Eat Diversification's Lunch

William W. Jennings and Brian C. Payne, *Financial Analysts Journal*, vol. 72, no. 2 (March/April 2016): 31–40

Diversification is often regarded as the only free lunch in investing, but is this true? The authors argue high fees can significantly reduce an asset class's diversification benefit, undermining its role in the portfolio. In both the asset allocation and manager selection processes, investors seeking to maximize risk-adjusted returns should evaluate the anticipated impact of fees on the diversification benefit. Investment returns of a portfolio involve many different components. One such component is the gain from diversification—widely regarded as the only benefit without an associated cost. But there are management fees and other expenses associated with diversification that vary between asset classes. These costs range from a few basis points to full percentage points. Asset class risk-adjusted returns can change significantly when investors take these fees into consideration.

The authors studied 45 asset classes using a standard single-factor model similar to the capital asset pricing model. Of these, 36 generated positive risk-adjusted returns from diversification prior to the consideration of fees, dropping to 30 after fees were considered. Moreover, because fees vary between asset classes, the risk-adjusted returns for some asset classes fell dramatically—fees wiped out at least half of the benefit of diversification for around 40% of asset classes. This caused the pre-fee and post-fee relative attractiveness of asset classes to be very different.

After considering fees, funds-of-funds saw their risk-adjusted returns, and thus post-fee attractiveness, drop the most. The authors suggest investors avoid this asset class altogether, or negotiate fees at the fund-of-funds level to close to zero. In contrast to funds-offunds, some real asset and emerging markets investments remain attractive diversifiers, despite their typically higher fees. For small institutions, the authors suggest investors aim to lower fees by consolidating funds into larger accounts with fewer managers. The authors do not argue against diversification. Rather, they make the case that investors should base asset class diversification decisions on *post-fee* expected returns. Decision makers should combine asset class decisions with manager-selection and investmentvehicle decisions. In other words, all costs should be considered when making investment decisions.

Five Myths About Fees

Ronald N. Kahn, Matthew H. Scanlan, and Laurence B. Siegel, *Journal of Portfolio Management*, vol. 32, no. 3 (Spring 2006): 56–64

The authors dissect five popular myths about fees to guide investors in maximizing expected alpha after fees.

Myth 1: Fees should be as low as possible. Although active management fees reduce returns, investors should look beyond headline fee levels and focus on potential after-fee returns. Higher fees are warranted for higher alpha and for lower risk. To justify high fees, investors must believe that they can identify alpha-producing managers and that managers can produce alpha on average in the future.

Myth 2: An incentive fee structure is best.

Fixed fees help managers to better time cash flows to match operating expenses such as research purchases or product improvements, but with fixed fees, managers are incentivized to maximize profits by growing their asset bases, not to necessarily deliver high returns. While incentive fees do better align investor and manager interests, investors should be aware that the promise of a high payoff can encourage managers to take excessive risk.

Myth 3: High-water marks are always

helpful. High-water marks ensure managers calculate incentive fees based on the increase from the highest prior net asset value. While this provision protects investors from paying for the same gain twice, a manager could be discouraged if a return requirement is too high, incentivizing the manager to either close the fund or increase risk.

Myth 4: Hedge funds deserve high fees.

Managers aim to deliver alpha or beta in exchange for a fee. While hedge funds strive to deliver alpha, traditional investment firms, which tend to take less risk, can also generate alpha. Because alpha is rare, investors should consider whether a hedge fund investment is worth the fees.

Myth 5: Alpha can always be separated

from beta. Returns cannot always be cleanly separated into alpha and beta. Many investment products offer a combination, often as a result of the particular strategy. Investors should analyze what proportion of an investment return is attributable to alpha to ensure they do not pay alpha fees for beta returns.

Copyright © 2016 by Cambridge Associates LLC. All rights reserved.

This report may not be displayed, reproduced, distributed, transmitted, or used to create derivative works in any form, in whole or in portion, by any means, without written permission from Cambridge Associates LLC ("CA"). Copying of this publication is a violation of US and global copyright laws (e.g., 17 U.S.C. 101 et seq.). Violators of this copyright may be subject to liability for substantial monetary damages. The information and material published in this report is nontransferable. Therefore, recipients may not disclose any information or material derived from this report to third parties, or use information or material from this report, without prior written authorization. This report is provided for informational purposes only. The information presented is not intended to be investment advice. Any references to specific investments are for illustrative purposes only. The information herein does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. This research is not an offer to sell or the solicitation of an offer to buy any security in any jurisdiction. Some of the data contained herein or on which the research is based is current public information that CA considers reliable, but CA does not represent it as accurate or complete, and it should not be relied on as such. Nothing contained in this report should be construed as the provision of tax or legal advice. Past performance is not indicative of future performance. Broad-based securities indexes are unmanaged and are not subject to fees and expenses typically associated with managed accounts or investment funds. Investments cannot be made directly in an index. Any information or opinions provided in this report are as of the date of the report, and CA is under no obligation to update the information or communicate that any updates have been made. Information contained herein may have been provided by third parties, including investment firms providi

Cambridge Associates, LLC is a Massachusetts limited liability company with offices in Arlington, VA; Boston, MA; Dallas, TX; Menlo Park, CA; and San Francisco, CA. Cambridge Associates Fiduciary Trust, LLC is a New Hampshire limited liability company chartered to serve as a non-depository trust company, and is a wholly-owned subsidiary of Cambridge Associates, LLC. Cambridge Associates Limited is registered as a limited company in England and Wales No. 06135829 and is authorised and regulated by the Financial Conduct Authority in the conduct of Investment Business. Cambridge Associates Limited, LLC is a Massachusetts limited liability company with a branch office in Sydney, Australia (ARBN 109 366 654). Cambridge Associates Asia Pte Ltd is a Singapore corporation (Registration No. 20101063G). Cambridge Associates Investment Consultancy (Beijing) Ltd is a wholly owned subsidiary of Cambridge Associates, LLC and is registered with the Beijing Administration for Industry and Commerce (Registration No. 11000450174972).

