

Cart

Q

Home ► All Journals ► Financial Analysts Journal ► List of Issues ► Volume 60, Issue 5 Hedge Fund Benchmarks: A Risk-Based Appr ....

Financial Analysts Journal > Volume 60, 2004 - Issue 5

1,062 703 14 Views CrossRef citations to date Altmetric PORTFOLIO MANAGEMENT

# Hedge Fund Benchmarks: A Risk-Based Approach

William Fung & David A. Hsieh Pages 65-80 | Published online: 04 Apr 2019

**66** Cite this article https://doi.org/10.2469/faj.v60.n5.2657



### Abstract

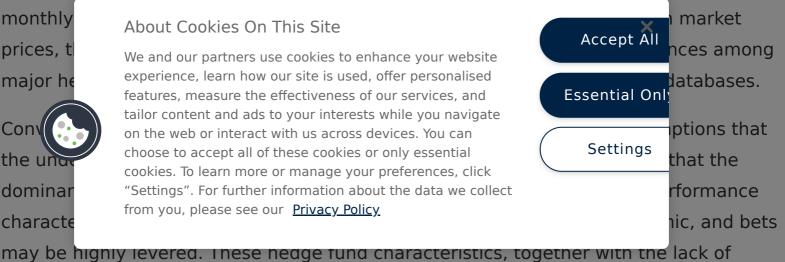
Following a review of the data and methodological difficulties in applying conventional models used for traditional asset class indexes to hedge funds, this article argues against the conventional approach. Instead, in an extension of previous work on assetbased style (ABS) factors, the article proposes a model of hedge fund returns that is similar to models based on arbitrage pricing theory, with dynamic risk-factor coefficients. For diversified hedge fund portfolios (as proxied by indexes of hedge funds and funds of hedge funds), the seven ABS factors can explain up to 80 percent of

monthly prices, t major he

Con the und dominar characte

### About Cookies On This Site

We and our partners use cookies to enhance your website experience, learn how our site is used, offer personalised features, measure the effectiveness of our services, and tailor content and ads to your interests while you navigate on the web or interact with us across devices. You can choose to accept all of these cookies or only essential cookies. To learn more or manage your preferences, click "Settings". For further information about the data we collect from you, please see our Privacy Policy



standardized reporting of historical hedge fund performance, greatly limit the information content of hedge fund indexes that are constructed by using conventional methods. At times, using such indexes can even produce misleading results.

In the study reported here, we used a method to create hedge fund benchmarks that captures the common risk factors in hedge funds by using asset-based style (ABS) factors. Model construction began by extracting common sources of risk from hedge fund returns. These sources of risk were identified by directly linking them to various market risk factors. These ABS factors were then used to construct a hedge fund riskfactor model similar to the approach in arbitrage pricing theory, in which the factor loadings (betas) are permitted to vary over time.

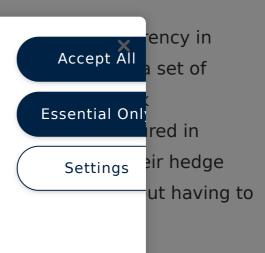
Thus far, researchers have identified seven risk factors. Equity long-short hedge funds are exposed to two equity risk factors—market risk (as proxied by the S&P 500 Index) and the spread between small-capitalization stock returns and large-capitalization stock returns. Fixed-income hedge funds are exposed to two interest-rate-related risk factors —the change in 10-year U.S. Treasury yields and the change in the yield spread between 10-year T-bonds and Moody's Investors Service Baa bonds. Trend-following funds are exposed to the same risk factors as three portfolios of "lookback" options—on bond futures, on currency futures, and on commodity futures. Empirical evidence shows that these seven risk factors can jointly explain a major portion of return movements in diversified hedge fund portfolios, as proxied by a fund-of-funds index.

Applying the risk-factor model to hedge fund indexes, we show that the model can identify risk differences inherent in these indexes, which in turn, helps explain anomalous return differences among them. An out-of-sample check on the usefulness of the risk-factor model with 2003 data indicates that the model explains a significant amount of the return differences among major hedge fund indexes.



### About Cookies On This Site

We and our partners use cookies to enhance your website experience, learn how our site is used, offer personalised features, measure the effectiveness of our services, and tailor content and ads to your interests while you navigate on the web or interact with us across devices. You can choose to accept all of these cookies or only essential cookies. To learn more or manage your preferences, click "Settings". For further information about the data we collect from you, please see our <u>Privacy Policy</u>



Hedge fund managers can also use ABS factors to communicate the systematic risk inherent in a strategy to investors in a format that is consistent with the qualitative description of the strategy's style. Thus, risk disclosure and transparency can be brought to a satisfactory aggregated level without having to analyze the huge volume of individual hedge fund transactions.

The same framework can be used by regulators to monitor aggregate exposures to systematic risks. This use would provide important input to the management of stressful events, such as the bond market decline of 1994.

### Related research 1

	People also read	Recommended articles	Cited by 703
--	------------------	----------------------	-----------------

### About Cookies On This Site



We and our partners use cookies to enhance your website experience, learn how our site is used, offer personalised features, measure the effectiveness of our services, and tailor content and ads to your interests while you navigate on the web or interact with us across devices. You can choose to accept all of these cookies or only essential cookies. To learn more or manage your preferences, click "Settings". For further information about the data we collect from you, please see our <u>Privacy Policy</u>

## Accept All

### Essential Onl

### Settings

Information for	Open access
Authors	Overview
R&D professionals	Open journals
Editors	Open Select
Librarians	Dove Medical Press
Societies	F1000Research
Opportunities	Help and information
Reprints and e-prints	Help and contact
Advertising solutions	Newsroom
Accelerated publication	All journals
Corporate access solutions	Books

#### Keep up to date

Register to receive personalised research and resources by email

🔛 Sign me up



Copyright © 2024 Informa UK Limited Privacy policy Cookies Terms & conditions

Accessibility

Registered in England & Wales No. 3099067 5 Howick Place | London | SW1P 1WG

### About Cookies On This Site



We and our partners use cookies to enhance your website experience, learn how our site is used, offer personalised features, measure the effectiveness of our services, and tailor content and ads to your interests while you navigate on the web or interact with us across devices. You can choose to accept all of these cookies or only essential cookies. To learn more or manage your preferences, click "Settings". For further information about the data we collect from you, please see our <u>Privacy Policy</u>

