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Hedge Fund Performance 1990–2000: Do the "Money Machines" Really Add Value?

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Abstract

We investigate the claim that hedge funds offer investors a superior risk-return tradeoff. We do so using a continuous-time version of Dybvig's (1988a), (1988b) payoff distribution pricing model. The evaluation model, which does not require any assumptions with regard to the return distribution of the funds to be evaluated, is applied to the monthly returns of 77 hedge funds and 13 hedge fund indices from May 1990–April 2000. The results show that, as a stand-alone investment, hedge funds do not offer a superior risk-return profile. We find 12 indices and 72 individual funds to be inefficient, with the average efficiency loss amounting to 2.76% per annum for indices and 6.42% for individual funds. Part of the inefficiency cost of individual funds can be diversified away. Funds of funds, however, are not the preferred vehicle for this as their performance appears to suffer badly from their double fee structure. Looking at hedge funds in a portfolio context results in a marked improvement in the evaluation outcomes. Seven of the 12 hedge fund indices and 58 of the 72 individual funds classified as inefficient on a stand-alone basis are capable of producing an efficient payoff profile when mixed with the S&P 500. The best results are obtained when 10%–20% of the portfolio value is invested in hedge funds.

I. Introduction

A hedge fund is typically defined as a pooled investment vehicle that is privately organized, administered by professional investment managers, and not widely available to the public.[1] Due to their private nature, hedge funds have fewer restrictions on the use of leverage, short-selling, and derivatives than more regulated vehicles such as mutual funds. This allows for investment strategies that differ significantly from traditional non-leveraged, long-only strategies.

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[1]See, for example, President's Working Group on Financial Markets ((1999), p. 1).