

The future of hedge funds

Myron S. Scholes

Chairman, Oak Hill Platinum Advisors

Frank E. Buck Professor of Finance, Emeritus, Stanford University

Co-winner of The Bank of Sweden Prize in Economic Sciences in Memory of Alfred Nobel 1997

Why do institutional investors allocate less than 5% of their assets to hedge funds? That is the question that most of the proponents of hedge funds ask the investment community. I believe there are many reasons for this, but I will list only a few of them in this paper. Hedge funds were not initially designed with institutional investors in mind, but were originally organized as partnerships to attract high net worth individuals. They use leverage, sell securities short, and charge incentive fees based on the performance of the fund. This structure is not well-suited to institutional investors, such as pension funds and endowment funds, mainly because investing in a leveraged partnership structure subjects the U.S. tax-exempt institutional investor to so-called, 'unrelated business taxable income.' Moreover, unless a hedge fund registers with the U.S. Securities and Exchange Commission as an investment company, the U.S. Department of Labor ERISA rules might prevent hedge funds from receiving incentive fees on hedge fund returns unless these institutional investors constitute less than 25% of the assets of the hedge fund. Although financial engineering and structuring can reduce the impact of these restrictions, they are binding constraints in many instances.

Institutional investors have generally invested in securities. In the past, they might have considered investing in hedge funds to be imprudent. More modern thinking, however, considers portfolio returns and risks and not the constituents making up the portfolio. Hedge funds might have risk and return characteristics that enhance portfolio return-to-risk characteristics. Institutional investors have also come to realize that long-only managers, such as mutual funds and banks, tend to hold large diversified portfolios that after fees, earn less, on average, than naïve investment strategies, such as investing in indexed-asset classes. They are paying for services that do not produce enhanced returns. As a result, they are moving to obtain active management exposures through investing in hedge funds, private equity, and real estate, and passive exposures through index products.

Hedge funds are increasing in numbers and in assets as a growing number of risk managers at banks and within the broker-dealer community are leaving to establish hedge funds. Traditionally, financial intermediation services, such as liquidity provision and risk transfer services, had been provided almost exclusively by financial institutions. Currently, however, traditional financial institutions prefer to earn fees more so through agency and less so through risk-taking activities. Hedge funds are taking up the slack and may be more suited to supply the capital necessary to support these risk-taking activities. This has led to a growing talent base in the hedge-fund universe, talent that has expertise in running leveraged, long-short strategies and providing returns that exhibit low correlation with returns on index-fund products. This talent base has attracted institutional investor capital.

Prior to this exodus of talent, hedge funds as a whole could not earn sufficient returns to invest the inflow of capital that would result if institutional investors held a large proportion of their invested capital in alternative investments. There is a delicate balance between the returns that can be earned from hedge funds and the capital supplied. Generally, the larger the capital supplied to any investment, including hedge funds, the lower the returns and, in turn, the flow of capital into that investment will fall. Extra capital, however, attracts talent and this enables hedge funds to provide additional services. The financial intermediation business, which includes hedge funds, requires a combination of talent to assess the level of capital to provide for liquidity provision and risk transfer, and an ability to convince other capital suppliers that the requisite returns will be available to them.

Fund-of-funds provide a diversified collection of underlying hedge funds for investors. A single hedge fund with only one line of business will suffer large losses from time to time. These so-called 'draw downs' are the natural consequence of providing intermediation services in specific areas. Most single strategies could suffer draw downs approximately equal to one-year's returns in a short period of time. A 10% draw down,

for example, might cause investors to leave the fund at the worst time for those funds that invest in negative feedback strategies. When the returns to providing intermediation services are greatest, the capital might move to new investments. It is hard for outsiders to deduce whether the losses were due to external circumstances or lack of skill. As a result, most funds try to provide services in more than one strategy in order to mitigate, through diversification, the draw down risk of their total portfolio.

As a hedge fund expands its strategies, it becomes a multi-strategy fund. A fund-of-funds is a multi-strategy fund that is built by investing in many independent hedge funds. There are advantages to both routes for diversification and risk reduction. The multi-strategy fund can dynamically allocate among its strategies to enhance returns.

Fund-of-funds advisors are not on the front line so to speak and do not have as much information to adjust positions as do the multi-strategy managers. Moreover, a large portfolio provides efficiencies over a large portfolio constructed from many smaller hedge funds. The smaller hedge funds may not have first call for intermediation services, might not be able to attract the same level of talent, do not have the infrastructure - including models, technology, and back-office services - and cannot secure the necessary financing lines available from the broker-dealer network to conduct business as efficiently as the larger multi-strategy funds. There are economies of scale and scope. On the other hand, the fund-of-fund advisors can pick the best talent available from the set of available hedge funds. The multi-strategy funds are unlikely to have gathered the best talent available in all strategies. And, as psychologists claim, most organizations function better in complex environments when there is a separation of the decision makers from the information gatherers. The information gatherers become too involved with their own activities to make the best strategic decisions. The fund-of-fund advisors play an important role here in making appropriate allocation decisions.

The real value added of the fund-of-fund advisor is to allocate investors' funds strategically among alternative hedge funds. Given that the underlying activities are complicated, dynamic, evolutionary, and may even be subject to extreme shocks from time to time, these advisors economize on the time and effort necessary to make the dynamic allocation decisions. In other words, it would not be economic or efficient for every investor to perform these functions. Moreover, these advisors warrant that the smaller hedge funds do provide services that capital providers should support.

Hedge funds activities are mainstream. They replace or supplement existing activities in the market. Many hedge funds attempt to earn abnormal risk-adjusted returns, in the vernacular, generate alphas, by forecasting cash flows, growth rates, and discount rates on these flows with more skill than other investors. But, this is common among many different investor classes. Hedge funds generally match long investments with short investments and leverage the lower risk portfolio to achieve returns and risk levels demanded by their investors. Mutual funds and other investors will most likely move to similar mechanisms. Currently, however, they tend to marry alpha risks with systematic exposures, market risks common to all securities, so-called 'beta' risk. Hedge funds separate these two risks. Some hedge funds predict these systematic exposures, for example, whether stocks will outperform bonds, or the Euro will depreciate against the dollar. Most of these alpha or beta strategies are zero-sum in that some investors gain at the expense of others. In certain instances, governments provide hedge funds with non-zero-sum gains because they are willing to subsidize hedge funds to foster other outcomes, such as supporting their currencies or holding down interest rates to resist market forces.

As mentioned previously, hedge funds provide intermediation services. They provide liquidity to the market and risk-transfer services. These are not zero-sum in that the demanders of these services know that they are giving up return, but do so to manage their risk or to buy insurance. Liquidity providers, such as hedge funds or private equity funds, earn returns by

providing liquidity to the markets. Liquidity is the price of immediacy, the cost of converting an asset into cash in a short period of time. The price of liquidity does not remain constant. It increases as investors become pessimistic about the economic outlook or at times of crisis. We observe that at times of crisis investors prefer to hold short-term assets and default-free interest rate curves become steeper. Investors prefer to hold government bonds, causing credit spreads to widen, volatility to increase in all markets, and equity and asset prices to fall. Hedge funds play an important role in providing liquidity to markets. Although they are paid for providing this service, their risk-management systems must provide for sufficient capital to sustain their positions.

Risk transfer differs from liquidity provision in that investors are willing to pay for the former in very liquid markets. The provider of risk transfer services is called a speculator, willing to take on excess risks and transfer them to the future until other market participants are willing to secure them. Hedgers are willing to pay speculators to assume risks because for them it is cheaper than alternative risk-reduction techniques. Hedge funds provide risk transfer services to the broker/dealer community and other entities similar in concept to a reinsurance company that provides risk transfer services for insurance companies. Reinsurance companies carry risks forward in time; insurance companies service client needs.

Hedge funds are young organizations. Time will tell whether they survive and what form they will ultimately take. With a change in the nature of the investor base, financial entities might again compete with hedge funds and provide market services more efficiently than are currently provided in the market. Most hedge funds are organized as 'hunter' groups that will not survive for many generations. That is, few have figured out how to build a business or a 'farm' to create an enterprise that has franchise value, where the whole is greater than the sum of the parts and where knowledge and know how belong to not only one or two individuals but the organization as a whole. Moreover, hedge fund services are complex and dynamic. Complexity creates a need to adapt. Myriad financial

service providers have not survived, were absorbed within other firms, or have failed to create vehicles to transform themselves with the changing demands for agency or principal services. Institutional forms are changing continuously. Estimates indicate that 25% of all hedge funds close their doors or are absorbed each year and, in aggregate the number of hedge funds and assets under management continues to grow.

While many hedge funds fail because of operational failings, and these are the most visible because they might reach the pages of the Financial Times, most fail because they either can not raise sufficient capital to sustain the cost of the operation or they suffer performance losses of sufficient size that it is not economic to maintain the fund. Most funds have so called 'high-water marks,' wherein they can not charge an incentive fee until the fund performance exceeds the previous high for the fund's net asset value. Therefore, with a loss, managers might have no incentive to stay on to recover investor capital. Essentially, the high water mark is too high to overcome. In any business there are operational failures. This is also the case in the hedge fund world. Funds fail because their risk management systems are inadequate or because they hold complex securities that are hard to value. And, they value securities to favor good performance, which works until it fails and a string of losses causes the scheme to unravel. But, industry participants learn from these miscues and correct the failures. There will always be operational failures in any industry. Survivorship, however, is the proof of a value-added activity.

Quantitative models fail, human intuition fails. Models assist intuition and conversely intuition facilitates the evolution of models. Without models hedge funds could not provide services. Models need to grow and evolve or they will become obsolete. However, without qualitative overlays to models; that is, a combination of models and fundamental analysis, hedge funds can not survive unless they frequently change their models to adapt to changing circumstances. The models hedge funds and financial institutions use to manage risk are

still in their infancy. The next decade will produce a revolution in how risk is measured and controlled. The components that must evolve include such diverse issues as how to aggregate risks, how to optimize holdings, how to plan for shocks, how to create a feedback system to learn from outcomes, how to provide information to superiors and investors, in effect, how to define transparency, how to build an appropriate capital structure given the dynamics of the asset mix, and how to compensate employees to mitigate risks.

The future for hedge fund investing is exciting, dynamic, and challenging. But, that is so for all forms of financial intermediation.