GREENWICH ASSOCIATES

A New Dawn for Hedge Fund Operations: Reducing Risk and Building Investor Confidence

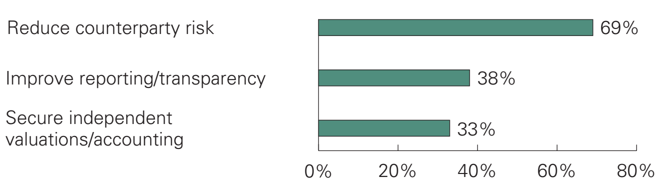
January 2010

In the wake of a financial crisis that reduced the ranks of global hedge funds, hedge fund managers are enacting a series of operational changes to reduce risk and enhance their ability to attract investors. Although a large majority of hedge fund managers believe these actions will have a positive impact on their ability to attract new assets, they are also placing significant demands on hedge fund operations and forcing many managers to make investments in new staff and technology. To manage the complexities associated with critical operational enhancements, many hedge fund managers are starting to automate key processes such as reconciliation, cash management, collateral management, and pricing. Managers that move quickly to implement these operational improvements could secure a significant advantage in the post-crisis competition for investor assets.

Hedge fund managers are responding to lessons of the global financial crisis by implementing a series of operational improvements designed to reduce counterparty risk and aid their funds in attracting investors.

The involvement of Lehman Brothers' prime brokerage clients in that firm's bankruptcy proceedings, the collapse of Bear Stearns, and the balance-sheet crises experienced by other key sell-side players all provided dramatic demonstrations of the perils of counterparty risk. Meanwhile, the Madoff scandal and other events were shaking the faith of many investors in hedge funds as an asset class. In response to these events, hedge fund managers have undertaken a comprehensive effort to minimize counterparty risk and address investor concerns about transparency through operational enhancements.

Hedge Fund Operational Improvements



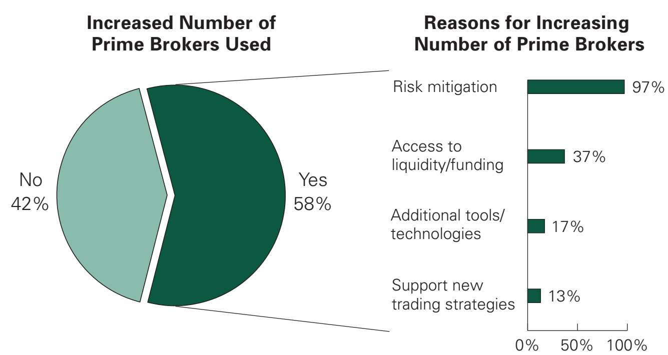
Source: 2010 Hedge Fund Operational Challenges Research. Note: Based on responses from 26 hedge funds in N.A., 17 in Europe, and 9 in Asia.

Approximately 70% of the 52 hedge fund managers participating in a recent survey by Greenwich Associates and Omgeo say they have altered their operations to reduce counterparty risk. Among the steps taken by these managers: revising policies and controls, increasing cash accounts, and adding prime brokers. Almost 60% of the managers participating in the survey have increased the number of prime brokers with whom they work — a move that virtually all the managers say is intended to reduce counterparty risk. Interestingly, managers based in Asia were especially likely to have increased their number of prime broker relationships, with 78% noting an increase. At the same time, nearly 40% of the managers have taken steps to enhance reporting and increase transparency for investors, and about one-third have started to obtain more independent valuations and accounting. One North American fund manager noted, "We've revised policies to tighten up procedures, gain a clearer view of investment flows and mitigate risk issues." Added one large European hedge fund manager, "Being efficient helps perceptions held by our investors. We are aware that all hedge funds are held at greater scrutiny these days."

However, when asked if they anticipate joining a clearinghouse to fully mitigate their counterparty risk, 98% of the firms surveyed responded no. Rather, they will continue to rely on prime brokers and other agents to clear their trades and will remain subject to the risk of another Lehman fiasco. As a result, hedge funds appear to understand the importance of employing systems to measure and manage their counterparty risk.

"The events of the past year have illustrated the direct link between operational improvements and hedge funds' ability to attract and retain assets from investors," explains Greenwich Associates consultant Jay Bennett. "There's a real change of behavior going on; the days in which investors would entrust their money to the black

Counterparty Risk Concerns Drive Hedge Funds to Add Prime Brokers



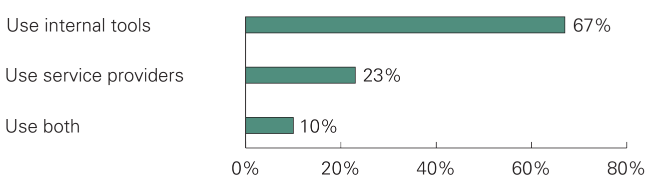
Source: 2010 Hedge Fund Operational Challenges Research. Note: Based on responses from 26 hedge funds in N.A., 17 in Europe, and 9 in Asia.

box of a skilled hedge fund manager are over. In the post-crisis marketplace, investors are demanding not only transparency, but also sophisticated operational processes and infrastructures capable of managing the types of risks they've experienced over the past 18 months."

Enhanced Operations Bring New Complexity and Demands

Many of the changes intended to improve hedge fund operations can also create vast amounts of work for in-house staff. For example, more than 60% of the hedge funds say they gather and manage data on trades and positions internally and more than two-thirds manage collateral internally. Both processes become significantly more challenging with the addition of new prime brokers. One European survey participant estimated that the addition of a single new prime broker increased in-house workload by 20%. Another U.S. manager estimated that when his fund moved from one to four prime brokers, the workload increased in step by a function of four. "There are more documentation requirements and our procedures have become more complicated, but we believe it's a worthwhile trade-off to reduce our counterparty risk," explains another manager based in Asia.

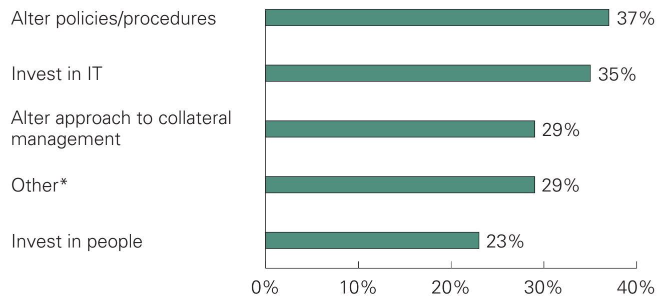
Most Hedge Funds Manage Collateral Internally



Source: 2010 Hedge Fund Operational Challenges Research. Note: Based on responses from 26 hedge funds in N.A., 17 in Europe, and 9 in Asia.

To handle the increased workload, even at a time where many financial services firms are reducing staff, 23% of participating managers say they have had to spend money to hire or upgrade internal operations staff, and 35% say their initiatives have required additional investments in IT. Approximately 40% of hedge funds have moved to address the increased work and complexity by automating key operational functions. While reconciliation was the function targeted for automation by the largest number of funds, managers also say they had made efforts to automate cash management, collateral management, pricing, accounting, and reporting. Automating traditionally manual processes has driven significant efficiencies at a number of hedge funds. One manager in Asia stated, "Automation of critical operations processes is essential in the post-crisis environment."

New Operational Demands Require Investments in Staff, IT



Source: 2010 Hedge Fund Operational Challenges Research. Note: Based on responses from 26 hedge funds in N.A., 17 in Europe, and 9 in Asia. *Other mentions include: structural changes, added a third party to optimize strategy, more thorough background checks, increased communication with clients, enhanced due diligence, and simplified products.

"In the aftermath of the financial crisis, hedge funds must be at the top of their game to attract and retain investor assets. Efficiency and automation in the middle and back office are as critical as portfolio management and trading. The results of this survey demonstrate that knowing where trades stand and where counterparty risk is concentrated are imperative to hedge funds attracting assets," notes Tim Lind, Managing Director of Strategic Planning at Omgeo.

Drivers of Operational Change

What is driving hedge fund managers' move to enhance operational processes and infrastructure? According to the results of the survey, it's not the prospects of stricter government regulation. Only about 5% of survey participants say their operational improvement efforts are being driven by expectations for future regulation. On the other hand, almost 55% of the managers say these enhancements are being driven by an internal desire to upgrade operations, presumably in the interest of reducing risk levels and increasing the attractiveness of their funds relative to those of competitors. More than 30% attribute operational changes to the increasing demands associated with the addition of new prime brokers, and a quarter say that pressure from investors has driven them to improve operations.

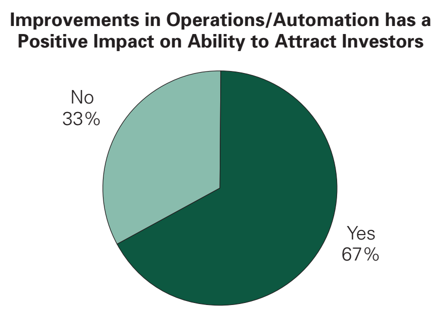
Drivers of operational change vary by region: 44% of Asian hedge funds report pressure from investors as a key driver of change, versus approximately 20% in North America and Europe. Also, pressure from counterparties was a bigger driver of operational change for Asian managers than for managers in other regions, with one Asian manager concluding, "Investors and counterparties are very keen on transparency, demanding clarity about our OTC positions."

Conclusion: Operational Improvements Directly Linked to Asset Growth

More than two-thirds of the hedge funds participating in the survey believe operational improvements and automation have a direct and positive impact on their ability to attract investors and assets. Enhancements to hedge fund operations deliver several critical benefits. They help funds reduce risk and build confidence among investors by providing transparency and reliable risk management processes. "Better routines and work practices have helped us provide transparency to our clients, which gives investors additional confidence in us," says one North American manager.

"Just as importantly," concludes Greenwich Associates consultant Andrew McCollum, "operational improvements can free up front-office staff to focus on clients and the investment process, and enable the firm as a whole to focus on new opportunities for growth."

Operational Enhancements Improve Funds' Ability to Attract Assets



Source: 2010 Hedge Fund Operational Challenges Research. Note: Based on responses from 26 hedge funds in N.A., 17 in Europe, and 9 in Asia.

Greenwich Associates consultants Jay Bennett and Andrew McCollum, and Tim Lind, Managing Director of Strategic Planning at Omgeo, contributed to this report.

Methodology

Greenwich Associates conducted telephone interviews with 52 hedge funds in North America, Europe and Asia. All participating funds had over $1 billion assets under management. Interviews were conducted in September and October 2009.

About Greenwich Associates

Greenwich Associates is the leading international research-based consulting firm in institutional financial services. Greenwich Associates' studies provide benefits to the buyers and sellers of financial services in the form of benchmark information on best practices and market intelligence on overall trends. Based in Stamford, Connecticut, with additional offices in London, Toronto, Tokyo, and Singapore, the firm offers over 100 research-based consulting programs to more than 250 global financial services companies. To learn more, please visit www.greenwich.com.

About Omgeo

Omgeo creates certainty in post-trade operations through the automation and timely confirmation of the economic details of trades executed between investment managers and broker/dealers. Every day, Omgeo enables an efficient community of more than 6,000 financial services clients in 46 countries to manage matching and exception handling of trade allocations, confirmations, and settlement instructions. Omgeo has also extended its trade lifecycle coverage to include counterparty risk management, which supports end-to-end collateralization and reconciliation across multiple asset classes. Leading organizations rely on Omgeo to help manage an increasingly complex investment industry by providing operational stability and solutions that complement the focus on profitability in an era of escalating trade volumes. Across borders, asset classes, and trade lifecycles, Omgeo is the global standard for operational efficiency across the investment industry. Formed in 2001, Omgeo is jointly owned by the DTCC and Thomson Reuters. To learn more, please visit www.omgeo.com.

GREENWICH ASSOCIATES

6 High Ridge Park Stamford CT 06905 USA

Tel: 203 625 5038/800 704 1027 Fax: 203 625 5126 email: ContactUs@greenwich.com www.greenwich.com