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Corporate Headquarters
 1776 Main Street
 P.O. Box 2138
 Santa Monica, California
 90407-2138
 TEL 310.393.0411
 FAX 310.393.4818

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Do Hedge Funds Pose a Systemic Risk to the Economy?

Hedge funds, which are investment pools open to high-asset individuals and institutions, have been exempt from many of the reporting and regulatory requirements that govern investment pools open to other investors. Hedge fund firms have been free to pursue any investment strategy they choose, including investing in complex financial instruments, such as derivatives and mortgage-backed securities. They have also faced few restrictions on short selling, leverage, or concentrated positions. As a result, they are able to move nimbly to take advantage of profit-making opportunities as these arise.

Because of their rapid growth over the past 15 years—from \$200 billion worth of managed assets in 1998 to \$2.4 trillion in 2010—their active role in many markets, and investments in financial instruments at the heart of the 2007–2008 financial crisis, hedge funds have come under increasing scrutiny. However, without more information on their operations, it is difficult for policymakers and regulators to assess the potential risk hedge funds pose to the stability of the U.S. financial system.

Despite the difficulty, RAND researchers have tackled this issue: They examined whether hedge funds contributed to the global financial crisis and whether their operations could destabilize the U.S. financial system in the future. To help overcome the scarcity of data, the researchers conducted interviews with 45 hedge fund managers and lawyers, investors, regulators, staff of industry associations, congressional staff, researchers, and policy analysts. They also synthesized the research on this issue and consulted available data, provided largely by a leading firm that compiles self-reported statistics on hedge fund operations and performance.

They found that hedge funds did not play a pivotal role in the financial crisis but have the potential to contribute to systemic risk in several ways. Recent regulations effectively address some, but not all, of these risks.

Abstract

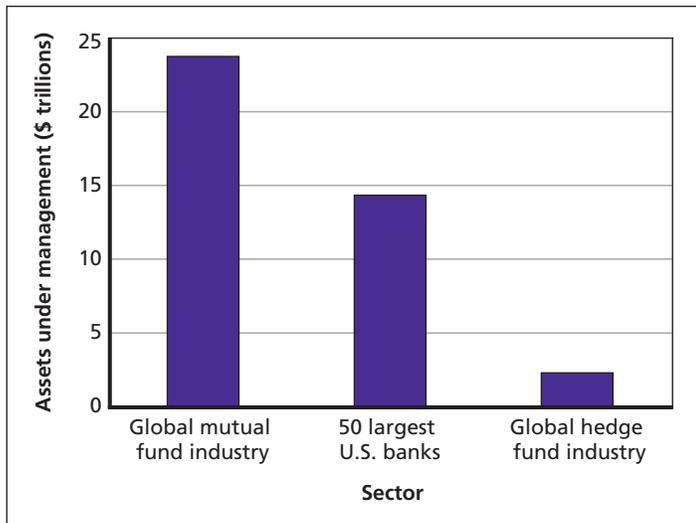
A RAND study revealed that hedge funds did not play a pivotal role in the financial crisis of 2007–2008 but that they have the potential to contribute to systemic risk in the future. The research identified related risk factors, assessed whether recent regulations address them, and highlighted remaining vulnerabilities: (1) the possibility of highly leveraged investments in markets with unreliable liquidity, a volatile combination; (2) the risk that large numbers of modest-sized hedge funds will pursue similar strategies; and (3) the absence of coordinated regulations across national jurisdictions.

What Was the Role of Hedge Funds in the Financial Crisis?

The researchers found that, although hedge funds worsened the financial crisis in certain ways, they did not play a pivotal role compared with other agents, such as credit-rating agencies, mortgage lenders, and issuers of credit default swaps:

- There is little evidence that they contributed to the mortgage bubble. In contrast to banks, which invested heavily in subprime mortgages, hedge funds invested on both sides of the market. By short selling subprime mortgages and banks that were heavily exposed to subprime debt, hedge funds called attention to the growing bubble.
- Although it appears that hedge funds contributed to downward price pressure and withdrew liquidity in some markets, it is hard to assess whether the effects were substantial. What is more, investor inflows into hedge funds that invest primarily in mortgage-related securities suggest that hedge funds also injected liquidity into some markets.

Assets Managed by Hedge Funds Are a Fraction of Those Managed by Mutual Funds or Banks



- There is little evidence that short selling, or shorting, of financial stocks (basically, betting that the price will go down) played a major role in the crisis. The banks' financial problems were much more directly related to their exposure to toxic mortgage assets and the market's response to that vulnerability.

However, the behavior of hedge funds destabilized financial markets in one important way: They withdrew tens of billions of dollars from prime brokers—divisions of banks that provide services and extend credit to hedge funds—and their parent investment banks out of fear that their assets could be frozen if the banks declared bankruptcy (an event that occurred in September 2008 with Lehman Brothers Holdings). Even though there were valid reasons for these withdrawals, they were essentially a run on the bank, like the actions of individual depositors during the Great Depression.

Do Hedge Funds Pose a Systemic Risk to the U.S. Economy?

Although hedge funds did not play a major role in the financial crisis, the researchers concluded that they can pose systemic risk to the financial system—that is, they can cause the initial failure of one or more financial firms or a segment of the financial system, disrupting a core function of the financial system—for several reasons:

- **Lack of information.** Because regulators have only fragmentary data on hedge fund positions, leverage, and asset values, they may not be able to determine whether systemic risk is accumulating. Even the prime brokers with which hedge funds do business are not able to see a hedge

fund's entire book. The speed at which hedge fund portfolios change adds to the difficulty of assessing their risk.

- **Lack of appropriate margin in derivatives trading.** The collapse of Long-Term Capital Management (LTCM) in 1998, then one of the largest U.S. hedge funds, was caused largely by banks' failure to impose appropriate margin requirements (or deposits that protect one party in a transaction from default by the other) on the derivatives trades into which LTCM entered. Increased lending discipline by banks following the LTCM debacle appears to have led to more-sensible margin requirements, but, absent regulation, the possibility remains that counterparties would once again relax these requirements.
- **Runs on prime brokers.** Prime brokers are vulnerable to massive withdrawals by their hedge fund customers in some circumstances—and this is true even if banks have strong balance sheets. It is in the public interest to reduce incentives for hedge funds to withdraw their assets at the first hint of trouble.
- **Short selling.** Some academic researchers and industry participants remain concerned about opportunistic short selling, which can result in an unjustified fall in stock prices or a decline in the real value of a firm—a decline that could be so rapid that the firm has little opportunity to dispel rumors about its financial health or for investors to provide additional capital before the firm collapses.

Facts About Hedge Funds

- There are about 10,000 hedge funds worldwide—worth about \$2.4 trillion in total assets in 2010.
- Assets in these funds vary enormously, with two-thirds of funds controlling less than \$100 million each and roughly 3.5 percent of funds managing \$1 billion or more each.
- Much of the growth in the hedge fund industry has come from institutional investors. As of 2011, about one-third of hedge fund assets came from pension funds, endowments, and foundations, and approximately 60 percent came from all types of institutional investors combined. Hedge fund profits, in other words, benefit individuals across the economic spectrum.
- Although the assets managed by hedge funds are one-sixth the amount of bank assets and one-tenth the amount of mutual fund assets, hedge funds account for a substantial share of the trading volume in many markets (from 25 to 60 percent of turnover, depending on the market).
- Although short sales are a common investment strategy, hedge funds by no means shun long positions.
- To the surprise of many observers, hedge funds as a whole lost money during the financial crisis but not nearly as much as more-standard investments.

- *Poor incentives for managing risk.* Researchers point to the failure of Bear Stearns as a lesson in the dangers of embedding hedge funds within larger financial institutions that are directly or indirectly subsidized by taxpayers. Such relationships can lead to the establishment of funds with risk-management strategies that would not survive absent the subsidy.
- *High leverage and poor liquidity.* Although high leverage is not currently a problem in the hedge fund industry, it could become a threat in the future. Even more important is the potential for a rapid drop in the liquidity of hedge fund investments, a development that caught many hedge fund managers off guard in 2008. (When investments lose their liquidity, large quantities cannot be sold quickly without causing a drop in their value.)

How Do Recent Financial Reforms Address These Risks?

The Dodd-Frank Wall Street Reform and Consumer Protection Act (Pub. L. 111-203, 2010) and other reforms address many of these concerns—particularly the first three. First, they aggressively address gaps in the information available to regulators on hedge fund operations, including the requirement to provide a great deal more information about the derivatives market. Second, they overhaul the derivatives market, giving regulators the authority to impose margin and other requirements that will cover the risk of default. Unless major categories of derivatives are exempted from the rule-making process, these reforms should help prevent the buildup of highly leveraged positions that can lead to the rapid failure of a large fund.

Third, by segregating hedge fund assets from other bank operations, regulations help reduce the risk of runs on the banks. However, the hedge funds will still have the option to deposit funds in nonsegregated accounts at foreign subsidiaries of U.S. banks. The potential remains that hedge fund runs at these subsidiaries will weaken the parent organization.

Recent reforms also make considerable progress in addressing the next two areas of concern—short selling and compromised risk-management incentives—but some questions remain about the effectiveness and comprehensiveness of the approach:

- Much more information about short sales will be available as a result of the legislation, a requirement that could deter opportunistic short selling. However, the

efficacy of the new criteria for suspending short sales remains to be seen.

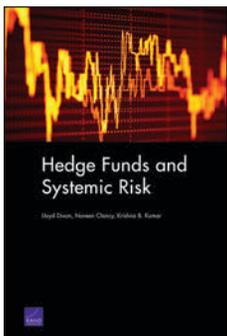
- The Volcker Rule, part of the Dodd-Frank legislation that restricts hedge fund investments by taxpayer-subsidized banks, can curtail one scenario in which risk-management incentives are compromised. However, it remains to be seen how the rule will be implemented. In addition, hedge funds may still have access to subsidized credit in other countries.

It is not clear, however, whether the reforms will do much to change the potential for hedge funds to build highly leveraged portfolios that turn out to be illiquid in periods of financial turmoil. Given the size cutoffs of recently adopted regulations, few, if any, hedge funds will be subject to direct regulations. This means that control of leverage and portfolio liquidity will fall largely to “market discipline” and indirect regulation—that is, the authority of federal regulators to oversee the risks banks face when they lend to hedge funds and other parties.

What Vulnerabilities Remain?

Although recent reforms have addressed many of the concerns outlined in this brief, the authors describe several gaps in the current regulatory system that should be considered in future reforms:

- It is still possible that the industry will be forced to sell large amounts of assets in illiquid markets when prime brokers withdraw credit or hedge fund investors withdraw funds in response to a financial shock. Although regulators will have much more information about hedge funds, they may not see this coming. Time delays in reporting may be too great, and the industry may move too quickly for regulators to have any meaningful oversight.
- Although reforms focus on the largest hedge funds, risks can be created by large numbers of modest-sized hedge funds that pursue similar strategies. Dodd-Frank gives regulators authority to address such risks, but those risks may not be adequately addressed in the ensuing regulations.
- Finally, regulations should be better coordinated across national jurisdictions. Although U.S.-based advisers currently manage more than 75 percent of global hedge fund assets, advisers and funds can easily change jurisdictions. Moreover, because the global financial system is so tightly interconnected, hedge funds in foreign jurisdictions can affect the overall industry. ■



This research brief describes work done for the Center for Corporate Ethics and Governance within RAND Justice, Infrastructure, and Environment, documented in *Hedge Funds and Systemic Risk*, by Lloyd Dixon, Noreen Clancy, and Krishna B. Kumar, MG-1236-CCEG, 2012, 146 pp., \$24.95, ISBN: 978-0-8330-7684-7 (available at <http://www.rand.org/pubs/monographs/MG1236.html>). This research brief was written by Laura Zakaras. The RAND Corporation is a nonprofit institution that helps improve policy and decision-making through research and analysis. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors. RAND® is a registered trademark.

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