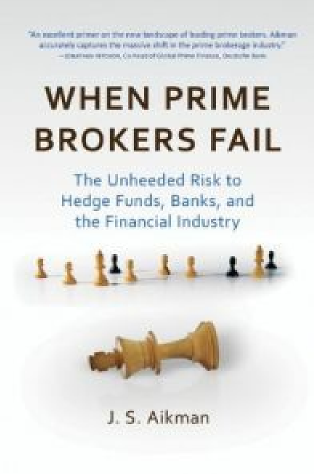

Book When Prime Brokers Fail

The Unheeded Risk to Hedge Funds, Banks, and the Financial Industry

J. S. Aikman
Bloomberg Press, 2010

Recommendation

Former investment banker J. S. Aikman has written an advanced textbook explaining the detailed, complex role prime brokers play in the global financial markets. Largely unknown to even sophisticated investors, prime brokers provide the services hedge funds need, including financing, trading, research, securities lending, trade execution and consulting. When Lehman Brothers collapsed in 2008, its prime brokerage business's legal and operational entanglements deepened the global financial crisis and shook hedge funds and other prime brokers worldwide. While esoteric, prime brokerage plays a huge role in global money management and certainly warrants more of this kind of professional scrutiny. *BooksInShort* recommends this comprehensive insider's guide to finance executives and investors who want to know more about the wizard behind the hedge fund curtain.

Take-Aways

- Prime brokers serve the trillion-dollar-plus hedge fund industry by providing securities custody, financing and other services.
- JPMorgan Chase is now the world's largest prime broker, thanks to its acquisition of the failed Bear Stearns.
- Lehman Brothers' bankruptcy cast light onto the shadowy risks of prime brokerage.
- Hedge funds lost up to $65 billion in prime broker collateral in the Lehman insolvency.
- As a result of the global financial crisis, investors redeemed about $1 trillion in assets from hedge funds in 2009 alone.
- More competition and hedge fund losses may mean that 40%-60% of them could close.
- Hedge fund managers receive compensation from incentive fees, ranging from 10%-48% of fund profits, and from management fees of 1%-5% of fund assets.
- A hedge fund often "hypothecates" or pledges cash and securities to prime brokers.
- In turn, the prime broker may "rehypothecate" assets in its custody for its own use.
- The 2008 crisis revealed risk management flaws that hedge funds and their prime brokers must resolve to avoid wholesale threats to the financial system.

Summary

From "Euphoric Episode" to Panic

The 2008 financial crisis wiped away the exultant mood that had dominated global financial markets for years. Not only did the collapse kill the market for mortgage-backed securities and other exotic securities, it also deflated the once-high-flying segments of private equity, leveraged buyouts, investment banking, and mergers and acquisitions. Among the most significant casualties were investment bank and prime broker Bear Stearns, which JPMorgan Chase rescued in March 2008, and mortgage guarantors Freddie Mac and Fannie Mae, which the US government took over that September.

> "The intersection of the prime broker and hedge funds in international finance is a particularly opaque world."

But the spark that ignited the real panic came on Sept. 15, 2008, when Lehman Brothers, one of the world's largest financial institutions, declared bankruptcy. Because of money market funds' exposure to Lehman, they succumbed quickly; their net asset values (NAVs) dropped below the legally and symbolically important $1 standard. That led to a cascade of redemptions by institutional and retail investors. As the crisis unfolded, major banks disappeared, and big corporations such as General Motors, AIG and Chrysler suffered deep financial wounds. Hedge funds and their main service providers, prime brokers, were flailed in the whirlwind, a maelstrom that neither had instigated, but that would test them and find them wanting.

Elements of Prime Brokerage and Finance

Prime brokerage firms serve as intermediaries among hedge funds, individual investors, investment banks, sovereign wealth funds, pension funds corporations and other parties. Prime brokers provide essential services including securities custody, collateral management, margin and leverage, corporate action processing, access to new capital, trading and risk management software, consulting, and even office space. If the prime broker is a subsidiary of an investment bank, it may provide additional services, such as trade execution and research.

> "If Bear Stearns was a warning shot, Lehman Brothers was a direct hit."

Major banks such as Credit Suisse, Bank of America, Merrill Lynch and Goldman Sachs have prime brokerage units, but many smaller, boutique firms also specialize in this end of the finance business. JPMorgan Chase is now the world's largest prime broker, thanks to its acquisition of the failed Bear Stearns. By offering such varied services and capabilities, prime brokers stand at the nexus of a complex set of transactions and activities that modern finance demands.

Game Changer

Lehman's multibillion-dollar insolvency – "the largest and most complex bankruptcy in history" – disrupted all these operations. It affected more than 1,000 hedge funds and involved some 140,000 failed trades. The Lehman bankruptcy froze between $40 billion and $65 billion in collateral assets owed to hedge funds, much of which is still unrecoverable. Because Lehman conducted its prime brokerage operations through subsidiaries in the UK and the US, the firm was able to transfer assets from one jurisdiction to another, thereby setting up a complicated and often incomprehensible web of transactions and liabilities that will take years to untangle. Caught in that web are hedge funds, which now must worry about the security of their collateral, and prime brokerages, which borrow and lend that collateral in their financing operations.

> "Normal financing transactions ground to a halt after September 16, 2008."

The Lehman debacle was a legal and operational nightmare that raised – for the first time and with far-reaching consequences – the threat of several prime brokerages failing. In the past, prime brokers fretted about their hedge fund clients folding, but now the tables had turned: Hedge funds were questioning the financial stability of their prime brokers and reassessing their international financing and counterparty risks. The prime brokers' weaknesses centered on poor risk management, failure to understand complex products and gross ethical violations. Excessive leverage, illiquidity and the convergence of unforeseen events complicated these factors.

> "The flood of collateral leaving the investment banks effectively limited their financing options to only one, the Federal Reserve."

The shock of Lehman's failure prompted many hedge funds to flee from large prime brokers, like Goldman Sachs and Morgan Stanley, in search of safety at universal banks. To restore confidence in their financial stability, both Goldman and Morgan Stanley registered as bank holding companies after the Lehman collapse.

> "The relationship between the hedge fund and the prime broker is...invariably a complex and complicated affair."

To reduce their counterparty risk, hedge funds began to use multiple domestic and international prime brokers. This created tremendous competition among prime brokers seeking to attract and maintain clients from a smaller pool of hedge funds. It also created marketing opportunities for emerging prime brokers to enter the business and work with new, smaller start-up hedge funds. Due to the large losses hedge funds suffered and the industry shake-up resulting from the 2008 crisis, some observers predict that 10%-60% of hedge funds could close their doors.

Hedge Funds, the Prime Clients

It's difficult to judge with certainty the actual size of the hedge fund market due to the sector's notorious secrecy, but estimates place global hedge fund assets at anywhere from $1.5 trillion to $1.9 trillion. Those numbers do not include the exponential factor of leverage, which boosts hedge funds' impact on global financial markets. Most hedge funds manage less than $100 million in assets; "micro hedge funds" hold less than $100,000. As a result of the global financial crisis and the failures of Bear Stearns and Lehman Brothers, investors may have reclaimed about $1 trillion in assets from the world's 10,000 hedge funds in 2009 alone.

> "In the most fundamental relationship, the hedge fund stores its cash, financial instruments or securities with the prime broker as collateral."

Hedge funds pursue above-market results in rising as well as in falling markets. For this, they use a wide variety of long, short and complex strategies. Investment returns come from their managers' skills at outperforming market indices. These largely unregulated funds are available only to qualified investors, who meet specific suitability, income and net worth criteria. Managers can structure a hedge fund as a "single entity," which aggregates capital into a limited partnership pool, or as a "multiple entity," which is more appropriate when investors come from different countries with diverse tax and regulatory requirements.

> "The primary goal of the hedge fund should be to match its internal needs with the external offering of the prime broker to operate effectively in the markets."

A hedge fund's goal is to produce short-term trading profits, which are the basis for calculating monthly fees. Investors pay dearly for the pursuit of exceptional returns, however elusive. "It is common for managers to charge one to five percent for maintenance of assets under management, and to take 10 to 48 percent of profits for performance fees." These are among the most lucrative remuneration packages in the entire investment industry. In fact, poorly performing fund managers often make more in fees than their investors do in profits.

> "Hedge fund managers benefit from one of the most lucrative incentive schemes in the world."

Hedge fund managers in the US are subject to state and federal laws, including the Investment Advisers Act of 1940 and, in some cases, the Employees' Retirement

Investment Security Act (ERISA). The UK's Financial Services Authority and its Conduct of Business rules govern its hedge funds as various regional, local and national authorities monitor these funds elsewhere.

> "From initial planning, fund formation and establishment, to capital raising, growth and ultimately termination, prime finance has a role in each step of a fund's life cycle."

Hedge fund investors should perform due diligence on the managers of their chosen funds, examining the legal, financial, commercial, strategic and operational aspects of the manager's activities. However, even investors who satisfactorily investigate their fund managers have lost millions due to poor supervision of the hedge funds' prime brokers or other service providers. For example, a manager could place collateral with a prime broker that becomes insolvent or misuses assets. Investors are also prey to intentional mispricings, counterparty fraud or failures, investments that stray from the authorized mandate, and breakdowns in investment processes.

> "A strong, developed stock loan desk can give hedge fund clients significant benefits."

Investors can protect themselves by looking for distinct organizational and operational separations among the management, execution, prime broker finance, broker dealer and investment adviser functions. When some or all of these responsibilities combine, as in Bernie Madoff's Ponzi scheme, investors are more vulnerable to fraud.

The Prime Business Model

While prime brokers deliver different services depending on whether they are serving domestic or international clients, their main offering is secured financing, or providing collateral-backed loans to hedge funds to underwrite and leverage trading and investment positions. Hedge funds also often "hypothecate" or pledge their own investors' cash or securities to the prime broker to cover trading shorts or a failure to meet margin calls. In turn, the prime broker may also use fund assets in its custody for its own or other clients' use by signing a "rehypothecation" agreement.

> "The largest looming risks for the future are related to opaque financial innovations and offshore markets."

In the US, prime brokers segregate their clients' assets and place them in separate accounts, but non-US firms may pool assets without distinguishing their individual owners. From an investor's perspective, segregated accounts are preferable, especially in the event of a prime broker default. In these instances, segregated accounts allow for faster identification of client holdings.

> "The challenge is not simply to establish a regime for orderly liquidation of systemically important firms but that the new paradigm must identify interlinkages, and predict and prepare for 'low probability / high severity events'."

Authorities inside and outside the US also regulate custody and hypothecation arrangements differently. These regulatory variances became particularly obvious in the Lehman collapse. Lehman used hypothecated assets to augment cash and other collateral to steady its floundering operations, not just its prime brokerage activities. Unraveling the ownership of these assets in the ensuing bankruptcy was difficult because of Lehman's opaque, cross-border prime brokerage organization, which was concealed within its complex corporate structure.

The Role of Securities Lending

In stock loan or securities lending, a money manager lends assets to a prime broker, which then makes the assets available to its hedge fund clients. In exchange, the asset manager holds collateral and collects a fee as well as any dividends the stock earns during the lending period. The expectation is that the prime broker will later return the stock to the money manager, but meanwhile title transfers from the lender to the borrower, a distinct aspect of stock loans.

> "Our system is broken and it requires a thoroughgoing repair...[in] a four-letter word: It's a mess." (*former US Federal Reserve chairman Paul Volcker*)

Thus, on the other side of the trade, the prime broker can then further lend the borrowed stock to hedge funds, which often will proceed to sell those shares to create the short positions essential to many hedge strategies. This process is particularly useful when funds trade in "hard-to-borrow securities." However, the prime broker, in turn, uses the hedge fund's collateral to make stock loans and raise capital to fund other services. This "on-loaning" of securities creates daisy chains of transactions that must unwind when stock loans fall due.

Title to the lent securities transfers back from borrower to the lender when the deal is done. The transaction is complete when the lender returns the collateral to the borrower, and the borrower returns the securities and fees to the lender.

Life Cycles and Risks in Prime Finance

Each stage of a hedge fund makes different service demands of its prime broker, who can help a start-up hedge fund select its staff members and its legal, audit and tax experts. As the fund prepares to raise capital and launch, the prime broker can assist in determining investor suitability and organizational setup. The prime broker continues to accommodate its client's needs as the fund grows. When it matures and reaches a maximum investment size, the prime broker will develop innovative financing and technical capabilities. If the fund should close, the prime broker will aid in "transition management" to avoid any abrupt market impact from the sale of its large or illiquid portfolio.

Prime brokers and hedge funds are both vulnerable to risks in business, investments and operations. Prime brokers face the major risk of being undercollateralized to a hedge fund client, so they must constantly monitor funds' positions. Yet, in unusual circumstances, collateral can become illiquid or systemic crises can occur, as happened in the 1990s with the collapse of the Long-Term Capital Management hedge fund and the Russian default. The 2008 crisis revealed deficiencies in risk management that hedge funds and their prime brokers must resolve to avoid wholesale future threats to the financial system.

About the Author

Management consultant and attorney **J.S. Aikman** lectures on finance at the University of Toronto. He was formerly a vice president of an investment bank in London.