# The Multi-Prime Broker Environment Overcoming the Challenges and Reaping the Benefits

March 2007



## MERRILL LYNCH GLOBAL MARKETS FINANCING & SERVICES

For more information, please contact:

#### **AMERICAS**

Cary Goldstein
222 Broadway
New York, New York 10038
212.670.2564
cary\_goldstein@ml.com

### EUROPE, MIDDLE EAST, & AFRICA

Emma Bryan 2 King Edward Street London EC1A 1HQ +44 020 7996 4938 emma\_bryan@ml.com

#### ASIA

Yvonne Wong 17th Floor ICBC Tower 3 Garden Road Central, Hong Kong +852 2536 3798 yvonne\_wong@ml.com

# The Multi-Prime Broker Environment — Overcoming the Challenges and Reaping the Benefits

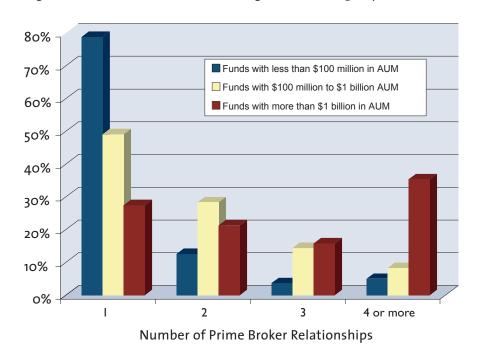
Historically, it has been common for a hedge fund to utilize multiple executing brokers and a single prime broker. Today, many hedge funds have discovered the benefits of working with multiple prime brokers, as well. Given the value that investment banks place on financing fees, prime broker balances play a significant role in determining access to the scarce resources that investment banks offer hedge funds: alpha-generating trade ideas, deal origination, research, calendar access, capital introduction, etc. By spreading balances across multiple prime brokers, a hedge fund can effectively leverage its access to these valuable resources from multiple providers.

Prime brokerage is a currency which can be used to obtain scarce resources from the investment banks.

Transitioning to a multi-prime operating environment does have its challenges; a significant one being the need to aggregate position, cash balance and risk data into consolidated reports. However, these operational challenges are not insurmountable. Additionally, the process of going multi-prime can often be a catalyst for reducing the dependence on outside service providers, giving the fund greater control over its operations. This is essential to growing the fund, especially given the increasingly global trend of institutional investors demanding "best-practices" back- and middle-office environment before investing.

The research indicates that most large funds are using multiple prime brokers. A 2006 study conducted by Greenwich Associates indicates that three quarters of hedge funds with more than \$1 billion in AUM utilize at least two prime brokers, and more than 35% of those funds use four or more. Many of the smaller funds surveyed utilized multiple prime brokers as well.

Figure 1: Number of Prime Brokerage Relationships by Fund Size<sup>1</sup>



<sup>&</sup>lt;sup>1</sup> Greenwich Associates study commissioned on behalf of Merrill Lynch, 2006

1

# Why are most hedge funds using multiple prime brokers today?

Most growing hedge funds find working with multiple prime brokers offers several strategic benefits that outweigh the cost of making the operational changes.

Hedge funds typically launch under the auspices of a single prime broker. Such relationships are very symbiotic in that the hedge fund receives a great deal of high-touch services during its start-up period and the prime broker garners 100 percent of the fund's asset balances. These relationships are also very sticky for the initial prime broker, since the new fund's operating procedures evolve around the trading, risk and reporting tools provided by the prime broker. But in spite of this stickiness, most growing hedge funds find working with multiple prime brokers offers several strategic benefits that outweigh the cost of making the operational changes.

For hedge funds that are dependent on securities lending, multiple prime brokers means additional sources of borrow and better pricing. Each prime brokerage firm has a different inventory of lendable securities, and some are deeper than others. Some firms specialize in hard-to-borrow and non-equity securities. Plus, adding prime brokers encourages a more proactive search for dividend enhancement opportunities.

A significant strategic benefit of prime broker dollars is the access they buy to alpha-generating ideas and strategies.

A significant strategic benefit of prime broker dollars is the access they buy to alpha-generating ideas and strategies. Consider the investment bank that utilizes its resources to research and recommends customized tax-efficient trades for the hedge fund. If the investment bank only has a trading relationship with the fund (and not a prime broker relationship), the investment bank can only get paid for its efforts through the commission on executing the trade (which in today's environment is usually quite small). However, prime broker financing revenues are more enduring. If the investment bank is providing prime brokerage services, it will earn fees on the balances from the hedge fund, which are usually more lucrative than a one-time trading commission. Since the resources to research such customized trades are limited, the investment bank will obviously give priority to the clients that generate higher revenues. By spreading prime broker balances (and the fees associated with

## Benefits of Adding a Second Prime Broker

- Effective leverage of prime broker dollars to gain access to alpha-generating trade ideas, capital introductions, etc.
- Ensure optimal financing through competitive pricing of margin lending and stock loan
- Gain access to competitive or innovative cross-margining policies of the competing prime broker
- Mitigation of risk: counterparty, financing, liquidity and operational
- Leverage across the relative strengths of service providers in synthetic financing, swap trading or market access
- Catalyst for reduced dependency on outside service providers, giving greater direct operational control

them) across multiple providers, the hedge fund can benefit from multiple firms with distinct resources working to help identify profitable trades.

Another key benefit is the ability for the CFO or COO to ensure that the fund is optimally financed through competitive pricing. Prime brokers with sole mandates, particularly the top-tier prime brokers, may charge a premium for their services (margin financing, security lending, etc.). A fund can assert pricing pressure on its initial prime by introducing additional prime brokers.

Additionally, the types of services and their relative strength vary across prime brokers. Not all firms have the same capabilities with regard to synthetic financing, swap trading, local market access or direct market access trading tools. Cross-margin policies and the manner in which off-setting positions can reduce collateral requirements also vary among different prime brokers. Capital utilization can be optimized by custodying a group of securities with whichever prime broker offers the best margin or collateral relief for any given position

Utilizing multiple prime brokers allows a hedge fund to mitigate several types of risk. Counterparty risk diversification comes from having multiple custodians. Funding liquidity risk is reduced by having financing relationships with multiple brokers, which is especially critical at times of market distress. On the operational side, multiple prime brokers can act as a "check-and-balance" for corporate action processing, minimizing the likelihood that a corporate action will be missed. Also, by not relying on a single prime broker, the hedge fund has more options in the event one of its prime brokers experiences a business interruption scenario. Lastly, splitting a fund's balances across multiple prime brokers ensures no single investment bank can view a hedge fund's entire portfolio, which gives the fund manger an additional level of reassurance when working with a prime broker firm that also conducts proprietary trading.

Utilizing multiple prime brokers allows a hedge fund to mitigate several types of risk.

# Implementing a Multi-Prime Broker Environment

Introducing additional prime brokers into a hedge fund's operating environment is not without its challenges. The degree of difficulty is directly correlated to the level of reliance on the initial prime broker for tools, such as intra-day P&L, position and risk reporting, investor reporting, etc. The more systems that are either maintained in-house or by a neutral third-party provider, the easier it is to add a prime broker.

#### **Data Aggregation**

Transitioning to a multi-prime environment requires a number of decisions to be made by the fund manager. One significant decision is the process for daily data aggregation. When a hedge fund uses only one prime broker, that prime broker has visibility to the entire hedge fund's book. With all trade and position data maintained in one place, it is easy for the sole prime broker to provide position, cash balance and risk reports for the entire portfolio. Once additional prime brokers are introduced, it becomes necessary to aggregate data from the multiple primes in order to generate consolidated reports, including whole-portfolio risk, portfolio accounting and performance metrics. If managing multiple funds, simply assigning a different prime broker to each fund minimizes the need for large amounts of data aggregation. However, if this is not practical and multiple prime brokers will be servicing a given fund, the three options for data aggregation are:

Investment strategy can drive the need for multiple prime brokers and dictate the solutions required.

# Key Operational Changes to Consider

- Aggregation of trade and position data from multiple prime brokers to generate consolidated reports: risk, portfolio, accounting and performance
- Decide on an allocation methodology for attributing trades to each prime broker
- Signing of new documentation, reflecting:
  - Corporate or management changes since inception
  - Changes in signing authority
  - Changes in the regulatory environment
  - ISDA agreements with credit terms appropriate to the fund
  - Inclusion of ERISA / pension money invested in the fund

The reliance on hearsay reporting is generally not a scalable solution.

Use the hearsay reporting capabilities of the first prime broker – In some cases, the prime broker with the bulk of the hedge fund assets (usually the initial prime broker) will offer to receive a feed of trades and positions from the second prime, and aggregate them into their established reports and statements. This is frequently the easiest and least disruptive option for the hedge fund in that the managers will continue to receive the same consolidated reports from the initial prime they are accustomed to. However, the use of hearsay reporting negates one of the risk diversification benefits of a multi-prime environment — preventing any one prime broker from having full knowledge of the fund's portfolio. Also, the reliance on hearsay reporting is generally not a scalable solution. As more primes are added, more balances are shifted away from the initial prime, who will therefore be less willing to provide hearsay reporting. Lastly, hearsay reporting can be operationally challenging for the initial prime, making one dependant on the quality of the people servicing the account. For these reasons, hearsay reporting can be a "first step" in the process of creating a multi-prime environment, but is usually replaced by one of the other two options described below.

*Utilize a middle office provider* – Providers of outsourced middle office services are frequently (but not always) fund administrators. From an operations perspective, fund administrators are engineered to consolidate a fund's data from multiple sources in order to perform their primary function of independently valuing a hedge fund's entire portfolio. However, there are some vendors who primarily offer data aggregation and reporting services without the administration and valuation functions. Either type of middle office provider can provide the same consolidated position, cash balance and risk reports that the prime brokers do. As a solution to the data aggregation problem, use of a middle office provider does not suffer the same scalability issue that hearsay reporting does. It also has the advantage of guaranteeing that each prime broker can only view their portion of the hedge fund's portfolio.

However, there are a number of difficulties with this approach, most notably the need for hedge fund staff to manage the process. Middle office outsourcing is an additional expense that will have to be borne by the fund. And many funds do not use a fund administrator for their onshore entities. Further, the fund may have outgrown the ability of their fund administrator to service the complex asset classes that are now being employed by the fund manager.

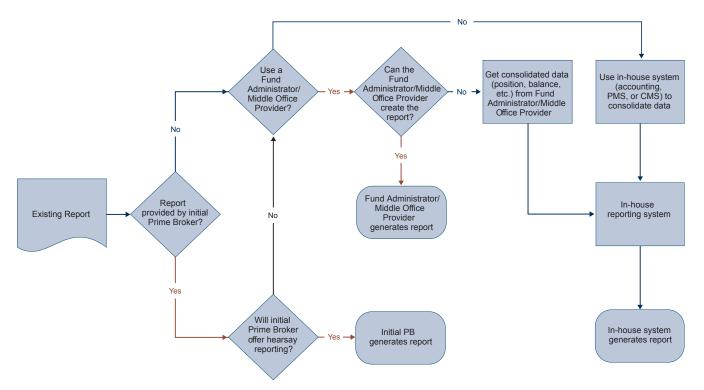
**Build in-house capabilities** – The most flexible (and generally most costly) solution is to implement internal systems that will consolidate the data across all prime brokers and generate all the necessary reports internally. Such implementations frequently start out with a vendor-supplied order management system to control the allocation of trades across multiple primes (see below). Requirements for control over in-house data aggregation requirements, internal and investor reporting requirements, and accounting control, lead to the third-party accounting solutions (e.g. Advent Geneva, IBSI's VPM or SS&C's AdvisorWare). These systems require customized integration with the other existing software packages and data present within the fund. While this approach does entail significant cost, both in terms of the vendor software and the IT services/personnel required to implement and maintain the system, the benefit is self-sufficiency and complete control over the fund's data. The importance of this can't be overstated. The single largest complaint, from funds in the multi-asset class arena, is the inability to access "our data" from external vendors and service providers. An in-house solution ensures that there is no dependency on any outside providers or vendors for custom reporting, data extracts, etc. Additionally, each prime broker will continue to have access to only their portion of the portfolio.

An in-house solution ensures that there is no dependency on any outside providers or vendors for custom reporting, data extracts, etc.

## **Consolidated Reporting Options**

OPTIONS	PROS	CONS
Hearsay by Prime Broker with Bulk of Assets	<ul> <li>Easiest implementation</li> <li>Least expensive option</li> <li>Already familiar with report formats</li> </ul>	<ul> <li>Not scalable – hard to add a third or fourth Prime Broker</li> <li>"Prime" Prime Broker can still view entire portfolio</li> <li>Dependency on "Prime" Prime Broker's release schedule, willingness to accommodate hearsay, etc.</li> </ul>
Middle Office Provider	<ul> <li>Scalable up to any number of Prime Brokers</li> <li>Each Prime Broker only views its portion of the portfolio</li> <li>Usually more cost effective than doing all aggregation and reporting in-house</li> </ul>	<ul> <li>Additional expense (to the fund)</li> <li>Some have difficulty with exotic products</li> <li>Must get familiar with new report formats</li> </ul>
Build In-House Capabilities	<ul> <li>Most flexible</li> <li>Each Prime Broker only views its portion of the portfolio</li> <li>All data remains in house</li> </ul>	• Most costly in both time and expense (usually borne by the management company)

Clearly these options vary greatly in cost and operational complexity. However, deciding on the most appropriate data aggregation method can be a fairly methodical process. It begins with identifying the key reports that are utilized by the hedge fund in the single prime broker environment. Next, each report needs to be analyzed individually to determine how best it can be generated in the multi-prime environment. The flow chart below depicts an analysis process that can be applied to each key report. After putting each report through this regimen, a clear trend should appear on how best to approach the general data aggregation question.



#### Trade Allocation and Position Maintenance

In addition to thinking through the data aggregation procedures, a trade allocation methodology needs to be determined. The trade allocation methodology specifies to which prime broker a given trade will be allocated. There are many options, but the most successful operating environments select a single methodology and use it consistently. Examples of trade allocation methodologies include: specifying a single prime broker for each legal entity; specifying a single prime broker for each strategy; or utilizing a pre-defined ratio to split allocations across prime brokers (e.g. using two prime brokers and splitting each trade evenly between them). An order management system, such as Eze Castle Trader's Console or Charles River, is particularly useful in managing the allocation process and helping track where a particular position is custodied when closing it out.

When choosing a trade allocation process, it is also important to consider the impact of cross-margining. If the hedge fund is trading off-setting positions that can potentially reduce collateral requirements, it is critical that the off-setting trades be allocated to the same prime broker. If the trades are sent to different prime brokers, no margin relief will be realized.

# Methodologies For Allocating Trades to Multiple Prime Brokers

Simple / Static	<ul><li>By Fund</li><li>By Market</li><li>By Strategy</li></ul>	Easiest to implement, but can be difficult to adjust in order to maintain target asset levels with each Prime Broker
Granular / Dynamic	<ul><li> By Security</li><li> On a pro rata basis</li><li> Arbitrary method</li></ul>	More complex to implement, but can be recalibrated when target allocations of balances across prime brokers are reviewed and changed
Opportunistic	By borrow availability     By executing Broker	Used in conjunction with one of the others as a "fine-tuning" method to optimize financing benefits

# Recommended Documentation Practices To Help with the Multi-Prime Broker Implementation

The current regulatory environment has never been more challenging. If it has been more than a couple of years since the initial prime broker relationship was established, the managers of the hedge fund should expect a more involved documentation process.

To ensure the documentation process for adding a prime broker proceeds as smoothly as possible, it is important to first review the fund and management company's formation documents. Any corporate or management changes that have occurred since the inception of the fund must be properly documented. Additionally, signing authority documentation should be current (e.g. no more than 2-3 years old). While going through the process of adding a second prime broker, save all required constitutional documents and other background information in a single place so they will be easily accessible if any prime brokers are added after the first two. Lastly, once the process has started, the fund's documentation contacts should be committed to providing all information in a timely manner. If there are any questions about the process or the documents themselves, quickly seek guidance from the documentation specialists at the new prime broker so as not to lose time or momentum.

When negotiating the prime broker relationship terms, the most critical initial factors to consider are timing, cost and risk tolerance. Clear communication of the fund managers' priorities, and views on these topics to both internal and external counsel is essential. That said, the terms will vary among prime brokers as a result of their different and evolving risk tolerance levels, legal perspectives and business models.

#### ISDA and Master Confirm Agreements

For hedge funds transacting in over-the-counter derivative markets, ISDA documentation must be negotiated (i.e. the ISDA Master Agreement and Credit Support Annex, collectively "an ISDA Agreement"). While a prime broker relationship is not a prerequisite for establishing an ISDA Agreement, hedge funds trading OTC derivatives will typically have an ISDA Agreement with each of their prime brokers at a minimum.

While going through the process of adding a second prime broker, save all required constitutional documents and other background information in a single place so they will be easily accessible if any prime brokers are added after the first two.

Fund managers should be aware that the presence of ERISA/pension money in the fund will lead to a much more complicated document and negotiation process in order to satisfy the regulations around ERISA/pension funds.

The main structure of an ISDA Agreement is defined by the International Swaps and Derivatives Association, Inc. which acts as a clearinghouse of industry standards, but each dealer can modify the schedules/annexes to the ISDA Agreement to reflect their particular views on legal, credit, business and other risks. One critical issue for the fund manager to consider in the ISDA Agreement is whether the credit terms are appropriate for the fund's strategy. Also, fund managers should be aware that the presence of ERISA/pension money in the fund will lead to a much more complicated document and negotiation process in order to satisfy the regulations around ERISA/pension funds.

Related to the ISDA Agreement is the Master Confirmation which sets forth and governs specific transaction terms, as opposed to the overarching contractual relationship established in the main document. While not required for trading, it is recommended for any fund trading large volumes of OTC derivatives. A Master Confirmation which is negotiated once at the beginning of the relationship, along with the process of negative affirmation minimizes the amount of documentation that must be generated, tracked and signed with each OTC transaction, and therefore reduces the strain on legal/documentation resources and back office operations.

# Transition to the Multi-Prime Broker Environment – Use Of Consulting Services

The prime brokers recognize that the process of adding an additional relationship can be taxing to a hedge fund and its back office staff. As a result, they frequently offer assistance in the form of consulting services to help mitigate these pressures. Consulting service offerings can include assistance with vendor and service provider selection, project management, and process flow reengineering. The consulting teams can also provide guidance when making the decisions outlined above (trading methodology, data aggregation, etc.) It is advisable to engage with the new prime broker's consulting services as early as possible in order to help smooth the new prime broker integration process.

# Reaping the Benefits of the Multi-Prime Broker Environment

Clearly the decision to evolve to a multi-prime broker environment carries with it a number of challenges to be faced and decisions to be made. While this decision will have an impact on the daily operations of the hedge fund, it is important to keep in mind that the multi-prime decision is ultimately a strategic one. Just evaluating the impact of an additional prime will highlight operational inefficiencies (manual processes, critical data residing in spreadsheets, etc.) that are present in almost all evolving hedge funds. Since back-office procedures will need to be modified to accommodate the additional prime broker, the multi-prime transition is an opportunity to address those day-to-day inefficiencies and move the fund's operations closer to "institutional caliber." This in turn, leads to better risk controls and can even improve the fund's attractiveness to institutional investors. But ultimately, utilizing the services of multiple prime brokers allows hedge fund managers to ensure that they are extracting the most value out of the prime brokerage community.

# Notes

