addressing alternative investments

Alternative investments have been a highly desirable option for many investors over recent years. The relatively strong performance of many of the private equity, hedge fund, leveraged loan, derivative and structured credit markets has worked as a useful counterweight against the lackluster returns and losses experienced in the equity markets.

Of course, not all returns have been constantly positive in these areas, nor have all traditional equity markets proved as disappointing to investors as some headlines suggest.

The 2000–2001 collapse in equity market values highlighted the fundamental problem with a conventional approach to equity portfolio construction: though this approach provided diversification across industries or geographies, it produced portfolios that remained hostage to one primary risk — namely, equity risk. One can increase an equity portfolio's diversification marginally by using different investment styles and/or by entering the small company or emerging market sectors; but even those diversification benefits can be limited, especially given the rise in correlation across global markets in times of periodic crises.

Alternative investments offer no guarantee of returns, but they are typically subject to different risks than equities and are less correlated than stock values — and this diversification of risks is the key. Moreover, the value of investing in these asset classes to counterbalance more traditional investment instruments is now well proven. And the precipitous rise in new money that is being injected into these alternative asset classes means they can no longer be ignored.

Alternative Asset Markets

The global over-the-counter (OTC) derivatives market has increased threefold since mid-2001, with the value of notional outstandings reaching some $270 trillion at the end of June 2005. According to the Bank for International Settlements, the exchange-traded derivatives segment is booming as well. Exchange-traded financial derivatives rose to a record $372 trillion by the end of June 2005 — a 22% aggregate nominal rise in the value of contracts traded in just a six-month period.[1]

The other alternative markets are booming, too. The hedge fund industry has been expanding at an average rate of around 20% since 2000. Today there are over 8,000 hedge funds, managing aggregate assets of approximately $1 trillion.

In private equity there are in excess of $1 trillion fund assets under management globally — Europe alone has nearly $360 billion in private equity fund assets. And last but not least, the very voguish leveraged loan market is now fast approaching the $1 trillion level in assets.

1 Source: Bank of International Settlements; bis.org/statistics/derstats.htm

Brenda Boultwood,
Head of Global Derivatives Services

Global Derivatives Services

Double-digit growth continues in the global OTC derivatives market, where the value of notional outstandings was at some $270 trillion as of June 2005.[1] Many of JPMorgan Worldwide Security Services (WSS) clients have begun to trade OTCs but are challenged by their operations and lack of independent pricing sources for the asset class. For a client trying to do it all in-house, experienced operations staff can be expensive and hard to find. Back and middle office processing is complicated and manual; and building a scalable technology infrastructure is cost-prohibitive for most.

To help clients navigate this alternative, JPMorgan created the Global Derivatives Services group to act as a center of excellence for OTC and exchange-traded derivatives pricing and processing. As one of the four pillars of our Alternative Investment Services division, Global Derivatives Services is fully integrated with our fund accounting, custody and collateral management services and supports a wide breadth of instrument types on an industry-standard technology platform. The group's operating model is designed to be highly scalable and easy to control.

"Global Derivatives Services supports a wide range of OTC instruments, and we are continually extending this range to meet client needs for instrument coverage," says Brenda Boultwood, head of Global Derivatives Services. "From simple interest rate swaps to more exotic structures, our Valuation Control Group is continually analyzing models and market data to provide independent valuations. Our in-house team of quantitative experts is available to consult with clients about derivative valuation issues."

On a daily basis, the Valuation Control Group calculates mark-to-market values using mid-market pricing. Market data is taken at exchange closing times, regardless of location, to provide the most accurate price available. Alternative price points can be captured according to client requirements. For exchange-traded instruments, industry-standard pricing sources are used to obtain market close prices.

JPMorgan's derivatives client base is broad, but it primarily includes asset managers beginning to employ a variety of trading strategies, including liability-driven investment, absolute return and high alpha strategies to maximize returns and remain competitive. The Global Derivatives Services Operations group and Valuation Control Group are based in the United Kingdom and support clients in Europe and the United States.

Global Derivatives Services has developed a direct interface between the OTC derivative system and the JPMorgan CommandD℠ derivative collateral management system. Clients can use this service to provide OTC derivative valuations downstream for derivatives collateral management purposes.

Whether clients need a solution for full outsourcing or to solve a specific OTC problem, JPMorgan can offer a package of services or a menu of options to choose from.

1 Source: bis.org/publ/otc_hy0511.pdf

The Shift to Alternatives

The very size of these markets can be off-putting to some. A lack of familiarity with the products, the investment criteria employed by private equity hedge funds or the tradability and transparency of the leveraged loan markets may discourage others from venturing into the alternative asset classes. But more and more funds are poured into these types of investments as investors seek to overcome knowledge gaps with careful examination and targeted staff hiring programs.

In a 2004 JPMorgan Asset Management survey of European (ex-U.K.) institutional investors, 65% of responding institutions said they were interested in using hedge funds to help deliver higher returns; 57% said they were looking to private equity, 52% to currency strategies, and 6% to other assets such as structured credit. The findings suggested that European institutional investors are highly amenable to exploring nontraditional asset classes and strategies to achieve higher returns from their investment portfolios, although exposure to these alternative investments is still extremely low. The exposure from investors in Europe showed just 1.10% were invested in private equity, 1.62% in hedge funds and just 0.3% in commodities.[2]

An overriding theme that emerged from the JPMorgan Asset Management survey was that pension schemes that currently allocate assets to alternative investments are highly satisfied with investment performance. The majority of respondents stated that returns had either met or exceeded expectations for all assets classes, which is a strong endorsement of nontraditional assets, especially during a difficult time for stock markets. This strong performance, combined with the diversification benefits of including alternative investments in a portfolio, is expected to lead to further inflows into these asset classes in the future.

The JPMorgan Asset Management survey did not detail funds intentions *vis-à-vis* derivatives usage, but investors' use of the instruments is still expected to grow strongly. In North America, for instance, a 2005 Greenwich Associates study showed that a growing portion of institutional investors is already using listed equity derivatives not only for hedging and investing purposes, but also as alternatives to "cash" equities. They do so to gain exposure or take new positions, and as a means of minimizing equity trading costs, according to the same study.[3]

"The rising employment of equity derivatives in such strategies as actively managed long-only equity, passive equity index and simple price speculation suggests that a rising number of institutions are using equity derivative

2 Source: *Institutional Insight 2004*. "New Sources of Return: A report into the search for higher performance among Europe's institutional investors" JPMorgan Asset Management

3 Source: Greenwich Associates 2005 Equity Derivatives study

instruments as substitutes for 'cash' equity trading," said Greenwich Associates consultant John Colon.

Added Greenwich Associates consultant John Feng, "From the standpoint of these equity professionals, equity derivatives offer two other benefits: anonymity and leverage — although the amount of the latter obviously varies from institution to institution and from broker to broker."

Alternative Obstacles

Of course, OTC derivatives markets can be particularly daunting. The contracts can be traded in a variety of forms and reference assets ranging from credit facilities to real estate, interest rates to single stocks, foreign exchange, commodities, and from a range of indices to baskets of assets. The agreements are technical, and a fairly high level of legal expertise is required to understand the various obligations and rights of the parties. The breadth of the OTC derivatives market is still emerging, and at the same time undergoing considerable change — just keeping up with the ever-expanding range of products and their growing diversity is challenging.

If simply keeping up with market developments puts a strain on scant resources, the increasing diversity of the instruments and structures underlying this expansion is enabling investors to tailor returns and manage liabilities in a more exact manner than ever before. Investors can use the rapidly expanding credit derivatives markets to venture into the relatively illiquid corporate credit markets, to hedge corporate credit risks or to take on broad market exposures. Commodity derivatives can be used to access the otherwise cumbersome physical commodity markets and exploit their recent above-average increases in returns. Equity derivatives can be deployed to replicate equity exposures at a relatively low cost. Interest rate and inflation derivatives can help hedge future liabilities, and foreign exchange instruments can be used either as overlays or as outright hedges.

The Operational Challenges

For new market entrants, the learning curve is not limited to understanding the structure of the transactions or investments themselves. Before investing in these new instruments, investors have to also consider all the associated operational issues that relate to engaging in these transactions or investing in alternative investments. Careful and considered due diligence examinations have to be performed, credit and market risk parameters need to be examined and potential trading counterparts compared. In addition, just accessing some of these markets will often demand a full review of normal investment processes — if not a complete trading systems overhaul.

65% of responding institutions said they were interested in using hedge funds to help deliver **higher returns.**

But it is in the post-trade world where alternative assets can often be most cumbersome. Here users have to face an array of operational issues that, combined with the new accounting and regulatory requirements, are burdensome in the extreme. Corporate pension funds considering investing in structured OTC derivatives, for instance, need to value their positions and net exposure with respect to each type of transaction engaged in with a particular counterparty on a daily basis. They would need to have the ability to make margin adjustments following moves in valuation, either posting additional collateral or taking collateral to mitigate their credit exposure to the trading counterparty. Doing this on a daily or weekly basis is cumbersome enough; but in times of severe market movements the processes can become all-consuming, leaving investors little time to continue with their core expertise, investing.

An October 2005 report by analysts from Celent[4] highlighted just how large this operational issue is. After a thorough evaluation of more than 12 solutions in the European asset management space, just six of them met the criterion of providing front to back office support, according to Isabella Fonseca, Celent analyst and coauthor of the report. "There is no clear leader for all categories considered given the distinctions between the various types of solutions analyzed," she said.

JPMorgan Addresses Alternatives

JPMorgan, which itself is one of the largest alternative asset market participants globally, has extensive experience with these issues. As one of the pivotal players in these markets, the bank dedicates vast sums each year to ensure its own systems and processes can rigorously deal with the risk and operational processes required to successfully manage these rapidly growing asset classes. Drawing on this internal expertise, the bank's traditional strength in risk management and anticipating rampant growth in alternative asset classes, JPMorgan Worldwide Securities Services has been building out a range of similar services to support clients' activity in the alternative markets. These modular services include our Global Derivative Services business, a transaction maintenance and daily valuation service for a wide and growing range of OTC instruments. Valuations are based on industry-standard models with inputs from a wide range of independently sourced market data that is rigorously scrutinized and scrubbed to ensure all possible discrepancies are eliminated. Also included in our modular

4 Source: Celent, *Comparing European Asset Management Systems*

Alternative Investment Market:

A snapshot of **opportunity**

For JPMorgan Worldwide Securities Services, the formation of Alternative Investment Services is an example of the ongoing effort to ensure our products and services meet the changing needs of our clients. Liz Nolan, head of Alternative Investment Services, commented, "Putting these businesses under one roof allows us to better capture the value of effectively serving our clients, who are investing in these vehicles." Here's a snapshot of the opportunity across these asset classes:

Hedge Funds[5]:

- The hedge fund market currently includes more than 8,000 funds globally with $1 trillion in assets under management. The market is expected to exceed $2 trillion by 2008–2009.
- Nearly 90% of European hedge funds outsource, compared to 50% in the United States.
- Rate of outsourcing is likely to increase with regulatory pressure.

Private Equity Funds[6]:

- An estimated 1,500 private equity firms have invested approximately $1.3 trillion.
- Private equity firms were expected to have raised $200 billion by the end of 2005, with 63% coming from North America, 29% from Europe and 8% from the rest of the world.
- By 2010, Europe is expected to raise 40% of new financing, with 52% from North America and 8% coming from the rest of the world.

5 Source: "Hedge Fund Services Heat Up", Wall Street Technology; fundstreet.org/research
6 Source: International Financial Services; Galante PE Directory; LP market data, Thomson; Private Equity Spotlight, preqin.com
7 Source: Bank of International Settlements, semiannual statistics on positions in the global OTC derivatives market for the end of June 2005
8 Source: S&P

Derivatives[7]:

- The derivatives market has two segments: over-the-counter (OTC) and exchange-traded derivatives.
- OTC derivatives account for 84% of the market, with outstandings currently estimated at $248 trillion. This market grew 32% from 2003 to 2004.
- Exchange-traded derivatives are attractive to asset managers who like the standardized nature of the investment. This market grew 20% from 2003 to 2004.

Leveraged Loans[8]:

- Volume of leveraged loans growing: global volume totaled $815 billion in 2005 from 2,112 deals, compared to $516 billion from 1,705 deals in 2004.
- M&A a driver: a main driver in leveraged loans in 2006 is expected to be increased M&A activity. Hedge funds now make up 9% of the leveraged loans market.
- FCS specializes in developing software (Wall Street Office), outsourcing solutions (Loan Admin Outsourcing) used to administer and analyze syndicated bank loans and Collateralized Debt Obligations (CDOs), and loan data management.

Private Equity Fund Services:

Fund Administration Services:
- Client On-Boarding Services
- Fund and Partnership Accounting
- Capital Calls and Distribution Management
- Treasury Services
- Tax Support Services
- Waterfall/Carry Administration
- Management Company Administration
- Management and Financial Reporting

Portfolio Administration Services:
- Partnership Investment Management
- Cash Flow Tracking and Forecasting
- Performance Measurement
- Pricing and Valuation Support
- Position Management Services
- Statement Reconciliation
- Comprehensive Reporting

Related Banking Products:
- Cash Management
- Custody
- Derivatives
- Escrow
- Foreign Exchange

Hedge Fund Services:

- Assistance with Fund Establishment and Setup
- Daily Pricing of Portfolio, Including OTC Derivatives
- Movement of Cash and Securities
- Processing of Corporate Actions
- Daily NAV and Profit/Loss Reporting
- Shareholder Interaction
- Maintenance of Financial Records
- Corporate Secretarial Services
- Custody for Fund of Hedge Funds

Global Derivatives Services:

- Transaction Capture
- Term Sheet and Confirmation Matching
- Instrument and Counterparty Static Data Set Up
- Daily Pricing and Change Explanations
- Model Validation and New Instrument Support
- Daily Reconciliation of Pricing, Positions and Cashflows
- Transaction and Lifecycle Management
- Positions, Pricing and Cashflows fed to WSS' Fund Accounting Platform
- Pre-settlement Payment Validation with Counterparty, including Cashflow Break Analysis
- Settlement Information Sent to Client
- Reporting of Trade Details, Event Diaries and Cashflows through Views, JPMorgan's Integrated Reporting Tool

FCS:

Business Consulting:
- Portfolio Management, Administration, Reporting and Analysis
- Cash Reconciliation
- Daily Activity Processing
- Data Cleanup
- Process Reengineering
- Organizational Consulting

Technical Consulting:
- Server Creation
- Environment Setup
- Network Configuration

Training:
- Basic and Advanced Training on Wall Street Office and/or Industry Concepts

A rising number of institutions are using equity derivative instruments **as substitutes** for 'cash' equity trading.

services are: JPMorgan CommanD℠, an advanced collateral management service; JPMorgan Hedge Fund Services, a hedge fund administration business incorporating JPMorgan's acquisitions of Tranaut and Paloma's middle and back office operational capacity; Private Equity Fund Services business; and Financial Computer Software (FCS), also known as Leveraged Loans Services.

The JPMorgan CommanD offering includes dedicated services that help clients meet the margining requirements under their International Swaps and Derivatives Association Credit Support Annex (CSA) agreements with counterparties. JPMorgan CommanD provides an end-to-end collateral management service incorporating valuations, CSA management, settlement and custody. In addition, it can track rehypothecation movements and service rehypothecated assets and can help clients structure cash reinvestment solutions to optimize the returns on cash collateral, working closely in line with the terms of their CSAs.

The instruments covered by Global Derivatives Services already include interest rate and currency swaps, FRAs, interest rate and currency options and swaptions, bond options, and single-name and index-based derivative transactions. In the works are services to support basket-type trades, equity swaps, inflation and commodities trading.

"The benefits of derivative services are easy to understand," says Brenda Boultwood, global business executive for JPMorgan's derivatives business. "Clients can pick and choose from a wide menu of support services, depending on the types of transactions and where their own internal systems may be lacking. They can effectively outsource these transaction maintenance and valuation processes to a reputable and dependable provider, JPMorgan, eliminating the need to make a substantial investment in all the systems and pricing services to which they would otherwise need to subscribe."

It is often at this stage in the yearly investment cycle that managers seek to re-examine their portfolio allocations, and consider venturing into new markets and how they will apportion their available investment capital. The alternative markets will — if all the surveys are correct — see a massive influx of investment over the coming months, which should do much to reduce current concentrations in traditional asset classes. But these new markets are testing fund managers. There is no easy way to gain a grip on the products and acquire solid market knowledge, nor any quick fix that will ensure that all the investments will deliver. But by working with JPMorgan Worldwide Securities Services, clients can at least hope to reduce some of the economic outlay necessary for their first investments and mitigate some of the operational risks.

JPMorgan's capabilities in these areas are a natural extension of the existing Worldwide Securities Services' longer-standing activities. For instance, just as valuations are hard to come by in the OTC derivatives market, they are similarly in short supply in the asset-backed securities (ABS) market. JPMorgan can provide all the necessary support for those investing in this market — from ABS lending services to valuations and custody services through Leveraged Loan Services. Additionally, the bank's collateral management service assists clients to fund assets in the most efficient, appropriate and economic manner possible.

Clients of JPMorgan's Alternative Investment Services also have the opportunity to access JPMorgan's cash management, custody, escrow, foreign exchange, transaction advisory and other functions. All the different services are housed within the integrated JPMorgan Worldwide Securities Services franchise, which provides everything from custody to fund accounting, securities clearance and trust services. Clients investing in alternative asset classes can focus on their core competencies while JPMorgan meets their administrative requirements.

According to Liz Nolan, global head of JPMorgan Alternative Investment Services and business executive for JPMorgan Worldwide Securities Services in Europe, the Middle East and Africa, "By integrating all of these services within a single division, JPMorgan has really created a unique offering. We are continually adding to those we offer and are working constantly to ensure that the services we have already meet all possible client needs and remain in step with regulatory, reporting and accounting requirements."

JPMorgan Worldwide Securities Services works continuously to ensure that its capabilities provide a properly meaningful service to its clients. The business of investing is complicated enough, without investors needing to turn to multiple providers. ○○○

If you have interest in speaking to us further about these capabilities, please contact your representative or visit us at jpmorgan.com/wss

Q&A

Interview with Liz Nolan

Liz Nolan, business executive for Worldwide Securities Services' interational regions and global head of JPMorgan Alternative Investment Services

Thought: How do you define the alternative investments space?

Nolan: Different asset classes continue to emerge, but we are currently most focused on the alternative investment products and strategies in which we are seeing most interest from our clients: derivatives, hedge funds, private equity and leveraged loans. It is for these areas that we are providing servicing solutions that allow our clients to increase efficiency and enhance their performance.

What trends do you think are driving the growth in this space?

Investors are increasingly looking for alpha, and the risk/return reward of the alternative asset markets relative to equity markets in recent years has been attractive to a growing number of investors. At the same time, improved information on previously unfamiliar instruments has allowed many investors to enter these markets for the first time.

The operational issues and the accounting and regulatory requirements that are associated with these assets can be cumbersome and costly. This is leading to another trend — that of seeking post-trade support from specialist providers, such as JPMorgan.

Why has JPMorgan created a dedicated Alternative Investment Services business unit?

The alternative investment space has grown rapidly and nowhere has this been more evident than in our clients' needs and expectations. JPMorgan created the Alternative Investment Services unit in order to keep pace with our clients' requirements for services across a range of asset classes that require specific skills and technology.

The group is directed to delivering what are sometimes complex solutions, at the same level of excellent service that we offer in the established securities market.

It brings together already successful businesses, such as our Financial Computer Software (FCS) group which has been providing electronic data management for the leveraged loan market for years, and makes their services more easily accessible to clients alongside other related — and sometimes newer — solutions. The other products included in the unit are Private Equity Fund Services, Hedge Fund Services and Global Derivatives Services.

How does JPMorgan Alternative Investment Services differ from what other providers are offering?

JPMorgan has a long and successful track record in delivering a comprehensive suite of securities services, and Alternative Investment Services is a logical extension of our capabilities. We can draw on the depth and breadth of the whole firm to offer sophisticated solutions tailored to our clients' needs. We can also offer clients a one-stop shop that they will not find with other providers.

To which types of clients can you provide services?

We can offer services to our institutional investor, pension fund, private equity firm, hedge fund, fund of fund, corporate, financial institution and other clients. JPMorgan's global footprint is expansive and our alternative investment services are available in a range of locations.

JPMorgan recently announced the expansion of its Hedge Fund Services business — what changes can we expect to see?

The acquisition of Paloma complements the hedge fund administration services offered through JPMorgan Tranaut with a distinctive middle and back office outsourcing solution. The middle office function of producing the manager's daily profit and loss account and calculation of performance fees offers independent credibility to institutional hedge fund investors and frees more resources for the manager to allocate to the core business of trading and investment management.

Why has JPMorgan chosen to make acquisitions in this space rather than grow organically?

JPMorgan has grown both organically and by acquisition in the alternative investments arena.

Our Private Equity Fund Services unit, which offers a full suite of high-quality outsourced fund administration services to private equity firms and institutional limited partners, grew from within the JPMorgan business.

However, where we have identified companies as best-in-class in their industry, it has sometimes made sense to bring them into the JPMorgan franchise. These specialist providers have generally had in common their strong technology and systems, considerable staff expertise and a good cultural fit with JPMorgan. A good example is JPMorgan Tranaut, with its infrastructure developed specifically for the hedge fund industry, its experienced personnel and its culture of appreciating the value of service.

JPMorgan will always consider the best arrangement for its clients when developing a service offering.