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The OTC  
Derivatives Boom  
*Five Factors that are  
Shaping the Future*



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## THE OTC DERIVATIVES BOOM

### *Five Factors that Are Shaping the Future*

It's no secret why financial-service firms are scrambling for a position in the over-the-counter (OTC) derivatives market. The use of these complex instruments is surging as institutional investors turn to them to hedge, speculate, or gain leverage. Created in the 1970s to let investors hedge interest rates, OTC derivatives now cover a much broader range of underlying assets, including stock indexes, individual stocks and—with the emergence of credit default swaps—many types of bonds. At the end of 2007, the notional value of OTC derivative contracts was \$596 trillion worldwide, having doubled in just two years. That's a huge amount of growth, and it has captured Wall Street's attention at a time of faltering markets, as firms search for new opportunities.

But where there's growth there are usually growing pains, and that's been the case with OTC derivatives. Early OTC derivatives trades were handled through manual processes that sometimes delayed processing and led to lengthy backlogs. While the backlogs have shrunk, the improvement has been achieved

through headcount increases, not automation. Today, OTC derivative contracts continue to create complexity throughout the trading and servicing value chain, leading to errors in confirmation, cash settlement, valuation, collateral processing, and reconciliation.

Valuations are proving to be especially problematic. Since no market posts the price of an OTC derivative, the counterparties trading it must separately calculate or source the value of each contract. This is rarely straightforward. Differences in calculated value can lead to disagreements over counterparty risk and make it necessary to transfer collateral. Such negotiations have become part of risk managers' mandates as the credit crisis has unfolded over the past year.

Up-front and periodic cash settlements are also a source of error: Settlements fail up to 30 percent of the time, with the contracts' complex terms leading to errors in calculated settlement amounts and payment date differences. The manual reconciliation that ensues is costly

and time-consuming for broker-dealers, counterparties, and those who service assets.

These issues represent both a challenge and an opportunity for the financial institutions that are deciding how to react to the growth of this market. There are two types of firms considering investment in capabilities and technology for OTC derivatives: First, there are the brokers and asset servicers whose clients trade OTC derivatives and expect these derivatives to be traded and processed like all of the other instruments held in their portfolios. In these cases, clients' growing use of derivatives has resulted in a strain on operations and a scramble to process ever-increasing volumes. Second, there are new entrants and existing firms that are stepping in to fill gaps in the market, providing market data, valuations, processing, and other services. These firms are investing to capture share and build a sustainable advantage in this new market.

In our judgment, the success of both types of companies' investments will depend on the extent to which they understand five critical areas of uncertainty and make decisions that give them room to maneuver as the competitive landscape takes shape.

**Factor #1: Derivative volume growth.** Financial institutions need to have a clear picture of where demand is coming from in the OTC derivatives market—and make some informed judgments as to where it is heading.

The first element driving demand is the investors. While hedge funds and other alternative investors were the biggest initial users of OTC

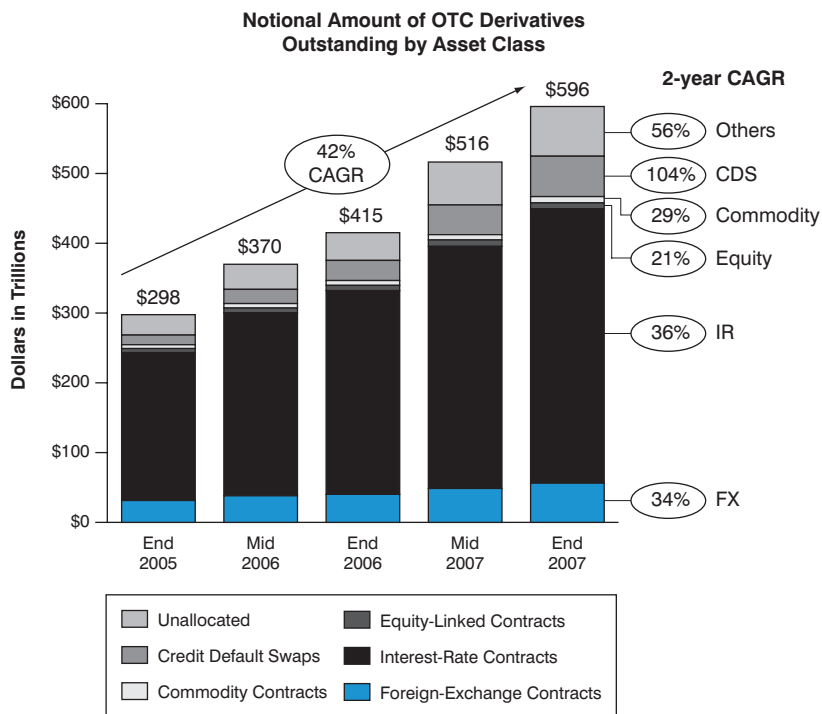
derivatives, they are being joined by traditional asset owners, including pension funds, mutual funds, and insurance companies. These entities see derivative contracts as an efficient way to protect positions or add risk, especially during a time of increased volatility in the equity and fixed-income markets. The increasing acceptance of OTC derivatives has made it possible for traditional asset owners to expand their investment mandates to include these securities.

As a result of increased investor usage and changing market conditions, the mix of OTC derivatives has changed over time. Today, interest-rate swaps represent the biggest part of the market

and have shown a 36 percent compound annual growth rate over the last two years. Credit default swaps—agreements in which one counterparty makes periodic payments to another in return for a payment if the underlying bond defaults—have been growing even faster. Exhibit 1 shows the growth of OTC derivatives by underlying asset class since the end of 2005. Firms must make choices to invest in capabilities for each type of OTC derivative, requiring a perspective on the growth of the overall market and of each instrument type.

**Factor #2: Regulatory changes.** In the United States, the credit crisis is prompting a move away from a laissez-faire approach. Responding

**Exhibit 1**  
*Growth in OTC Derivatives*



Source: BIS Quarterly Review, 2007; Booz & Company

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to pressure from a more aggressive Federal Reserve, the broker-dealers, buy-side firms, and industry utilities that comprise the so-called operations management group have been increasing their commitments, and tightening their timeframes, for improving market efficiency. One important new commitment—now targeted for the end of 2008—is the incorporation of an auction-based mechanism to settle credit-default-swap payments. This is an illustrative example of a regulatory shift in reaction to market events. Though future commitments are not yet defined, market participants will need to invest carefully to build the flexibility necessary to meet future regulations.

Unlike the Fed, the European Central Bank, Bank of England, and Bank of Japan have kept quiet about the OTC derivatives market. However, they have contributed to some general policy recommendations developed by the Bank for International Settlements (BIS) and the Financial Stability Forum (FSF), two organizations based in Europe. BIS, which counts 55 central banks as members, has proposed that those involved in the OTC derivatives market find ways to cut delays in trade documentation and confirmation, move toward uniform central-party clearing, address risks of unauthorized novations, and strengthen counterparty risk management. FSF, which represents the G7 central banks, has recommended the adoption of a cash-settlement protocol that would make it unnecessary to physically deliver certain obligations when a credit event occurs. Both

organizations have proposed that automated coverage be expanded beyond plain-vanilla swaps.

**Factor #3: Vendor moves.** The explosion in derivatives trading has attracted a set of new and old companies into the market, offering services along five points in the value chain. Market-valuation vendors such as Markit calculate the valuations of selected OTC instruments, giving counterparties help with this complex task. Industry utilities such as DTCC and SwapsWire offer centralized confirmations of OTC derivative trade terms. Market-data vendors such as Bloomberg provide at least some information specific to OTC derivatives. Software vendors such as Calypso and Sungard sell systems that financial firms use to automate trading and processing of OTC derivatives. And outsourced solution providers handle a broad range of middle- and back-office service tasks for OTC derivatives.

A couple of trends are emerging that will change the competitive landscape. One is the entrance of established exchanges to offer market-based trading and clearing, starting with the simplest, highest-volume instruments. For example, the Chicago Mercantile Exchange recently announced a trade-clearing service for interest-rate-swap products. The second development is increased acquisition and joint-venture activity in the sector, as vendors look for ways to gain momentum. The recent move by Markit and DTCC to create a joint venture to confirm and process OTC derivatives is an example of this shift. As market participants develop their offerings, brokers

and asset servicers will have more choices, and competing vendors will need to define and defend their competitive positions.

**Factor #4: Emerging standards.** Another development that is setting the stage for a more efficient OTC derivatives market is the emergence of standards in a variety of areas, including technology and trade processes. FpML, a markup language to which many of the world's biggest investment banks have contributed, has emerged as the standard language for OTC derivative trade terms. Moreover, FpML can now be sent via SWIFT, the worldwide financial-messaging network that allows banks to securely exchange information—meaning that derivatives traders and servicers can now leverage an existing communications platform.

Counterparties involved in OTC trades are also beginning to establish standard inter-firm processes and protocols, cutting down on the amount of manual work required. The most notable of these processes is the pre-affirmation of cash settlements, which is helping to decrease the incidence of breaks and failures and the accompanying thicket of claims and counterclaims.

Some standard approaches to managing risk are also emerging, especially with respect to collateral management and the creditworthiness of different counterparties. The market's coalescence around certain platforms and processes will be a boon to those financial institutions that understand the changes and can capitalize on them.

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**Factor #5: Internal expertise and capabilities.** No single financial institution has all the capabilities necessary to cover the whole value chain of OTC derivatives trading and servicing. But most financial companies have entered the area with several relevant capabilities, making the question which capabilities to leverage. A financial institution may be in a particularly good position, for instance, to calculate cash settlements and maintain collateral. But it may prefer to rely on outside parties for services such as trade confirmation and valuation. This inward analysis of strengths, and where those strengths fit, are critical in shaping a company's strategy for the OTC derivatives market.

### **The Path to Success**

Which financial-service companies will succeed in the OTC derivatives market, and what will be the

source of their success? In a market heading for a quadrillion dollars in notional value, it is safe to say both that there is room for many companies to make money and that not every company will make it in the same way. However, this is the time for companies to start determining their strategic positioning—how broad or narrow their product coverage should be, whether they will come to market with limited or full-service capability, and whether they should jump into the market quickly or wait to introduce something more comprehensive.

The decisions that companies make today will be only as good as their ability to take into account each of the five factors. Investment in OTC derivatives capabilities will be tested by increasing investor usage, developing regulations, emerging standards, and a changing vendor marketplace. Firms must also

inventory their internal capabilities to determine what is transferable to an OTC derivatives offering. After carefully considering these factors, each firm will have a better perspective on the strategic logic of their desired offering and how to launch it in the marketplace.

The path forward is defined by the ability of each firm to critically assess the competitive landscape and define its strategic objectives. Once the strategic direction is set, the five areas should be monitored to determine their effect on the OTC derivatives market and the defined offering. The growth in the market today is creating a bias toward action, while the present uncertainty casts doubt on potential investments. Successful firms will make the trade-off between opportunity and uncertainty to establish themselves in this new market.



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