Building a new house

International Derivatives Clearing House, a new clearing service for interest rate swaps, was launched in December. Christopher Edmonds, its chief executive, talks to ***Ryan Davidson*** *about the venture*

During the financial crisis, and particularly since Lehman Brothers' filing for Chapter 11 bankruptcy protection last September, counterparty credit risk has become one of the main concerns of market participants and regulators. And, believing it to be one means of cutting counterparty risk substantially, regulators in Europe and the US have been increasingly pushing the over-the-counter derivatives market towards centralised clearing platforms.

Much of the initial focus has been on credit derivatives, with several new clearing services launched for this market over the past few months. But attention is also turning to other asset classes. On outlining his proposed framework for regulatory reform on March 26, the US Treasury secretary, Timothy Geithner, stated: "We will force all standardised OTC derivatives contracts to be cleared through appropriately designed central counterparties. These will be subject to comprehensive settlement systems supervision and oversight."

Given such high-level backing for central clearing platforms, the December launch of a new clearing house for interest rate swaps by New York-based International Derivatives Clearing Group (IDCG) could be seen as particularly timely. "We didn't found this clearing house because of recent regulatory pressures on OTC derivatives, but it doesn't hurt us," agrees Christopher Edmonds, chief executive of IDCG.

Called the International Derivatives Clearing House (IDCH), the platform went live on December 27 after gaining regulatory approval from the Commodity Futures Trading Commission on December 22. The service only covers US dollar interest rate swaps at present, but the firm is currently working on a plan to expand into euro and then sterling swaps. In the longer term, it envisages clearing Canadian dollar, Mexican peso and yen products.

"Central clearing helps markets to grow, providing more transparency and certainty to all market participants no matter where they are in the food chain. We are looking forward to being part of a macro solution in this area," adds Edmonds.

IDCG has the backing of New York-based stock exchange group Nasdaq OMX, which became a partner and investor in the business in the second quarter of 2008, before taking an 80% stake on December 22. Nasdaq OMX's matching and clearing technology is used to process contracts for clearing in the new venture.

Although Edmonds declined to reveal the volume of trades processed so far, he reports IDCH has carried out a limited amount of business every day since launch. The flow of business has been hampered by technical issues, which Edmonds hopes will be resolved shortly. More than 100 buy-side firms have participation agreements with the clearing house but are waiting for IDCH and the futures commission merchants (FCMs) – brokers and dealers that carry out clearing on behalf of buy-side clients – to complete all the backoffice work necessary to fully automate the service.

There is a temporary solution in place to allow trades to be cleared, but dealers have been reluctant to use it extensively to process client orders, believing it would not be able to handle high volumes of business, Edmonds says. Once all these issues are reconciled, IDCH hopes to have 15–20 FCMs signed up by the end of the year.

In terms of how the platform works, market participants trade interest rate swap contracts bilaterally as normal, and then replace them with economically identical futures contracts via an exchange of futures for swaps on IDCG's website, *www.swapdrop.com*. These contracts are then cleared and settled through IDCH.

Unlike the competition to clear credit derivatives, there are already a couple of established players in the interest rates arena. London-based clearing house LCH.Clearnet has run its SwapClear service since 1999, which it claims clears approximately 50% of the global interbank market for swaps. Meanwhile, Chicago-based derivatives exchange CME Group launched its CME Cleared Swaps platform in July 2008.

According to Edmonds, the founders of IDCG saw a gap in the rates clearing market for a service that would better complement existing trading practices for interest rate swaps than the rival offerings.

"IDCH's interest rate futures are completely fungible with what is traded in the OTC market-place. This was one of our goals for the project, so firms do not have to alter their trading behaviour at all," says Edmonds. "To date, other attempts to transform OTC swaps into futures have not retained the same degree of granularity that our product offering does. These attempts to force the market from the specific to the generic, and to shift the point of price discovery and liquidity, have had a significant influence on their success."

It could be argued that, as an alternative to the swap conversion method, users could just go out and trade interest rate futures on an exchange. But Edmonds emphasises IDCH's service enables users to continue with their tried and tested execution mechanisms of negotiating bilateral swaps, giving greater flexibility than what can be achieved with exchange-traded contracts.

One of the major issues surrounding central clearing platforms, particularly relevant after Lehman Brothers' demise, is making sure the margin requirements and guarantee fund are sufficient to withstand the default of a clearing member. Edmonds says the clearing house performs a stress test of its guarantee fund on a daily basis. The stress test must start with the failure of the top clearing member and entails shifting prices by the greatest observable move over the past two years. As a supplementary stress test, IDCH will fail the top two clearing members and a random third, and shift prices by six standard deviations.

Initial upfront margin requirements currently range from $900 for a two-year contract to $14,800 for a 30-year contract. Margins are calculated using a time-series analysis of the clean price of a swap over a six-month trading period. There are 13 time buckets for margin processes, stretching from two years to 30 years. IDCH creates a swap for each of the buckets and recalculates the clean price on a daily basis using the day's interest rate yield curve. That daily clean price is subject to the time-series analysis, which is stressed by three standard deviations to create a 99.7% confidence level.

"We didn't found this clearing house because of recent regulatory pressures on OTC derivatives, but it doesn't hurt us"

Christopher Edmonds, International Derivatives Clearing Group

To understand how the risk is evolving, IDCH further separates the results into 30-, 90- and 125-day periods and chooses the highest observed results to determine the biggest risk. In normal market conditions, the highest number rounded up to the nearest $100 will be used as the initial margin.

For the variation margin, IDCH uses its proprietary interest rate yield curve to reprice each swap at least twice a day, and the company is capable of doing this four times a second. The sum of the clean price and the net accruals is the fair value of the swap, and that is the required variation margin. Once margin is collected, it is held in segregated accounts, so that users are protected in the case of a bankruptcy.

The guarantee fund currently totals $80 million. IDCG performs a daily stress test on this using the same algorithm set up to calculate initial margin, but applies a higher standard deviation move. Should the level of the guarantee fund be insufficient to cover the modelled losses, IDCG will top up the fund by having clearing participants pay their pro rata share of the shortfall. At present, the fund will be adjusted on a quarterly basis, although the analysis is performed daily and the clearing house says it will readjust the fund if conditions warrant.

"If you are going to ask me if this system can withstand a Lehman-sized event, well, not today but we don't have that much risk on our books. Our guarantee fund will increase over time as the volume of business we process grows," says Edmonds. ■