

REPRINTED FROM

Risk

RISK MANAGEMENT | DERIVATIVES | REGULATION

RISK.NET OCTOBER 2012



In depth

Interest rate swaps

RIP OTC

Swap futures gaining buy-side fans



“I started to ask why on earth someone would trade a swap if they could trade a future instead”

Don Wilson, DRW Trading

“We expect it will end up being cheaper to trade more standardised products on exchanges”

Michael O'Brien,
Eaton Vance, p2

“We have tested some swap futures but we won't start using them unless sufficient liquidity is available”

Richard Prager, BlackRock, p3

“Six months ago, trading swap futures was perceived as hypothetical, but it's a real possibility now”

Head of rates trading at a US bank in London, p3

“You always hedge into the most liquid flow and presently that is OTC swaps”

Stuart Giles, Tradition, p5

On September 18, CME Group launched an interest rate swap futures contract for the second time – 10 years after its first attempt. The original product never took off, so what's different this time?

Well, everything. Back in 2002, the CME's pitch to potential users was that the contract would help them fine-tune their interest rate hedges. Today, the product brochure highlights the black, regulatory cloud hanging above the over-the-counter market as a result of new clearing, trading, reporting and capital rules.

“A unique combination of events,” it shouts. “Issuers and investors are considering the current environment and are taking a second look at interest rate swap futures,” it claims. “With interest rate swap futures, financial risk managers sidestep many of the challenges that may be associated with OTC derivatives in the current market environment,” it promises.

Unusually for marketing material, this is not hype – in fact, it's fairly understated. OTC market participants have recognised for some time that the new regulations would create incentives for the trading of more standardised products, but among dealers at least the hope was that this would mean greater standardisation of OTC swaps, rather than a migration to listed products. Those hopes have been eroding as regulatory reform drags on.

And clients really are taking a second look at the idea of swap futures. Ten of them spoke to *Risk* for this month's special feature, and many of them already seem sold on the idea, subject to some fairly important caveats about liquidity in these new products.

This is the other big difference between 2002 and 2012. When CME launched its swap futures first time round, it said, somewhat weakly, that the contract would be supported by “lead market makers designated by the exchange to provide liquidity”. There were no names.

Last month's press release was very different. The new-look swap futures have four market-makers on board already – Citi, Credit Suisse, Goldman Sachs and Morgan Stanley. They claimed to be “pleased”, “committed” and “excited”. If the product takes off, which won't happen without approval from the Commodity Futures Trading Commission, those will not be empty words. The timing, at least, is right.

Duncan Wood, Editor

RIP OTC: swap futures gain buy-side fans

New regulations could make interest rate swaps a more expensive product. As a result, large buy-side firms are looking at alternatives such as swap futures, which are also getting the backing of some dealers. Is this the beginning of the end for over-the-counter swaps? By Matt Cameron

“I felt like the little boy shouting the emperor had no clothes,” says Don Wilson, founder and chief executive of DRW Trading in Chicago, recalling a conversation he had with an irate congressional staffer when the Dodd-Frank Act was still in its infancy. “I asked her: ‘What do you think the difference is between a swap and a future?’, and she got really angry, calling it a stupid question, and saying everybody knows swaps are more risky. And I said: ‘With all due respect, they are very similar things, but are called different names and regulated in different ways.’”

That’s where it started for Wilson, who joined forces with four other Chicago-based futures and options trading firms to set up Eris Exchange, a swap futures exchange, in September 2010. “Given the way the Dodd-Frank rule-making was shaping up, I started to ask why on earth someone would trade a swap if they could trade a future instead – trading the swap looked odds-on to be much more

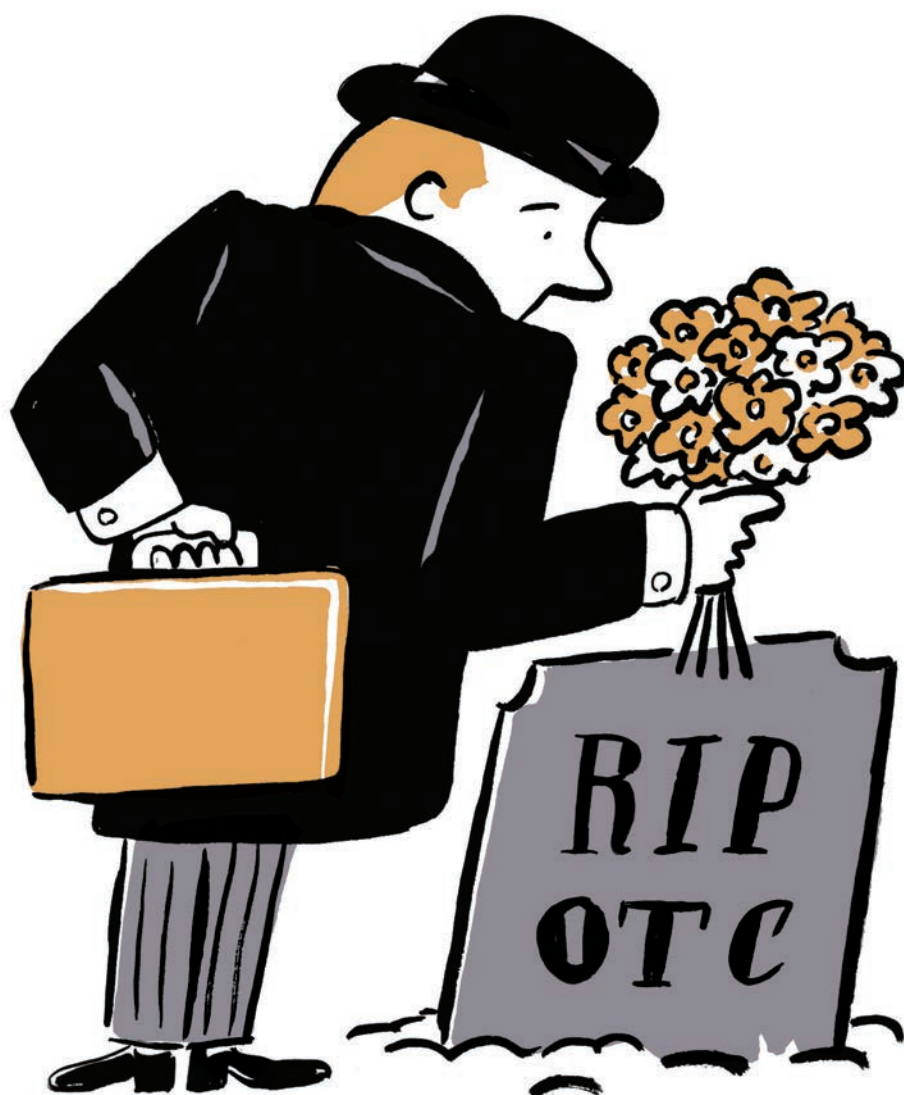
expensive because of the new regulations. A lot of people said I was crazy, and I certainly wasn’t sure about it. But it was my best guess,” he says.

It’s a guess that is starting to look more prescient by the day. Ten big buy-side derivatives users that spoke to *Risk* for this article – among them, Alliance Bernstein, BlackRock, Eaton Vance and Vanguard – are asking the same kind of questions as Wilson. Many of them are currently performing cost-benefit comparisons for a variety of different products, from over-the-counter swaps to traditional interest rate futures and newly minted swap futures – and it does not look pretty for OTC markets. The analysis looks at factors including certainty of execution, liquidity, spreads, margin requirements, cross-margining potential, and execution and clearing fees. Most managers say they will switch to alternative products if they prove to be cheaper than cleared OTC swaps – and many expect that to be the outcome.

“We are analysing the costs and the effect of the new regulations on swaps

trading, and we expect it will end up being cheaper to trade more standardised products on exchanges. If you want exposure to rates in the fastest and most efficient way possible, then we think that’s likely to be through swap futures. The regulations governing futures aren’t as prohibitive, and the margin required against the positions is far less than is required for swaps. If liquidity moves into these products, then we will look to trade them instead of swaps,” says Michael O’Brien, head of global trading at investment management firm Eaton Vance in Boston.

Other firms may not have a choice, some argue – they will have to use swap futures because they will be unable to get dealers to clear their OTC swap portfolios. Even the biggest futures commission merchants (FCMs) are looking to sign up a relatively small number of clients and many derivatives users could find themselves left out (*Risk* September 2012, pages 26–28, www.risk.net/2202297). “Most large clearing firms are focused on 100 to 200 clients. So what happens to all those



players that can't get mandates? They may be forced to use more futurised products," says a head of business development at one trading venue in New York.

Momentum is now starting to build. On September 18, CME Group announced plans to launch an interest rate swap futures contract in November (see *Risk*, October 2012 page 6). A couple of weeks earlier, ICE announced all cleared OTC products on its energy market will be transitioned to futures or options products, allowing participants to avoid the impact of new OTC market regulation in the US, which comes with reporting, business conduct and registration requirements.

But the rise of the swap future is far from certain. For one thing, rules on clearing, margin and capital are still in flux. For another, asset managers also have to consider issues such as the potential tax treatment of the new products, and the pros and cons of client

money segregation regimes for OTC products and futures (see box, *Tax confusion*). Ultimately, though, it all depends on liquidity – none of these firms wants to put on a position that can't be closed out quickly and cheaply.

"We have tested some swap futures – ceremonial test trades – but we won't start using them unless sufficient liquidity is available. Assuming the swap futures market had comparable liquidity to the OTC swaps market, the lion's share of our portfolio could be switched into swap futures," says Richard Prager, New York-based global head of trading at BlackRock.

Some liquidity in swap futures could come from firms such as DRW Trading or even big hedge funds, but many clients want to see the involvement of the large swap dealers. This group of 10 to 20 international banks currently enjoys a virtual monopoly on execution in the OTC space and has been trying to avoid

cannibalising that business, but even they are coming round to the idea. Four dealers – Citi, Credit Suisse, Goldman Sachs and Morgan Stanley – have signed up as market-makers for CME's new contract, and some dealers are also understood to be building connectivity to Eris Exchange.

"Six months ago, trading swap futures was perceived as hypothetical, but it's a real possibility now. We have five execution projects we are putting IT dollars towards, and two of them are swap futures platforms. The notion that participants will move to use the swap futures product is compelling. We want to be involved in risk transfer wherever it happens, and it looks like a reasonable slug of business could move towards these platforms," says one head of rates trading at a US bank in London.

Not everyone is convinced. "The dealers have no incentive to start making markets on those platforms.



"We have tested some swap futures – ceremonial test trades – but we won't start using them unless sufficient liquidity is available" Richard Prager, BlackRock

What's in it for them? Diminished returns? Competition with market-makers they haven't competed with before? And the rules aren't final yet – there is no way dealers will start providing full-blown liquidity to these platforms until the rules are final," says one interdealer broker in London. Brokers will certainly be hoping that proves the case, because the migration of OTC swaps to exchanges threatens one of their big revenue streams (see box, *Unhappy brokers*).

There are currently two swap futures trading venues in the US – Eris

Exchange and the CME – each listing two different takes on the product (see table A). The Eris contract condenses the cashflows of collateralised OTC swaps into a single settlement value, and the exchange claims its contracts have the same sensitivity to a 1-basis-point move in the swap curve – the DV01 – as a dollar cash-collateralised OTC swap. In contrast, the CME swap future is a three-month contract that delivers a CME-cleared OTC swap at maturity.

The chief argument for both is margin efficiency. The CME product will initially be margined using a two-day holding period. The Eris contracts clear at CME and the clearing house currently calculates margin using a five-day holding period, although this could drop to two days – or one – as liquidity in the product builds. This means participants could end up posting far less margin on swap futures than cleared OTC swaps – which will be margined using a five-day holding period at least, and in some cases seven days.

"It's a big selling point. We ran our entire book through the CME margin calculator for OTC swaps and it spat out a huge number, even though we have a relatively flat book. Then we looked at equivalent products and compared the margin numbers and it

was a significant difference. So we're now comparing the possible basis risk we will incur by trading a swap future versus the swap, and it looks like it's going to be worth taking that risk in order to avoid the huge margin obligations," says a derivatives trader at one US insurance company. He declines to share details of the margin analysis the company carried out.

Sun Capital Advisers, the investment arm of insurer Sun Life Financial, has also done a basic margin analysis, says Glenn Barry, a managing director at the company. The forecast savings are why the firm is exploring the use of futures and swap futures instead of OTC swaps. He estimates that at least 50% of the portfolio could be replicated using futures-type instruments.

Another major selling point is the standardised nature of the product, and the ability to add and subtract exposure without multiplying line items – unavoidable with OTC swaps that each start and end on different days. These proliferating OTC trades make it more difficult to manage a portfolio, asset managers complain.

"In order to have efficient books, the ability to compress line items is a necessary tool, but with the current swaps

Tax confusion

Over-the-counter swaps users have a lot of factors to weigh up when considering a move to other products – but one underplayed issue is the tax treatment.

Futures contracts fall into section 1256 of the US Internal Revenue Code and, as a rule of thumb, are generally marked-to-market at the end of the year, with the change in value treated as a capital gain or loss. Cleared OTC swaps, on the other hand, are classified as notional principal contracts (NPCs), with payments taxed as ordinary income.

Certain types of derivatives users, such as life insurance companies, prefer to hold NPCs and are averse to capital gains tax. But it is not clear which treatment would apply to swap futures.

An Internal Revenue Service (IRS) notice of proposed rule-making issued on September 15 last year stated that a contract that can be considered both a 1256 contract and an NPC would always fall into the latter category. This potentially means the Eris Exchange swap futures contract would be deemed an NPC and taxed as ordinary income if the proposed rules are finalised in their current form, tax specialists say.

"The main change the IRS made was to the definition of NPC. While people have historically understood that a contract with a single bullet payment cannot be an NPC, the new rules say that any new instrument that includes accruals of periodic payments will fall

into that category. Under what people have understood current law to be, the Eris contract is a 1256 contract because it has a single bullet payment. Under the revision it would be an NPC because the single payment reflects an accrual of different payments. And although it would still be a futures contract, given the new tiebreaker rule, NPC treatment would prevail and the Eris swap futures contract would not be a 1256 contract. What is surprising is that the IRS takes the position that the Eris swap futures contract is an NPC under current law. And this is something the private sector has trouble understanding," says Erika Nijenhuis, partner at law firm Cleary Gottlieb Steen & Hamilton in New York.

The rule has not been finalised and is not expected to be ironed out until next year. If the Eris contract is deemed an NPC, the company may have to break down its variation margin payments – which reflect three adjustments that mimic the economics of an OTC swap – so customers can carry out a proper tax analysis.

The CME swap future, on the other hand, looks likely to be classed as a 1256 contract. Although the IRS proposes to treat options on NPCs as NPCs, it is silent on the appropriate treatment for futures on NPCs, meaning they should be treated as 1256 contracts, says Nijenhuis. Once a participant takes delivery of a cleared swap, however, the tax treatment will switch to that of NPCs.

market you don't get that ability and there exists operational risk we don't want, which leads one to think about trading on constant maturities and International Monetary Market (IMM) dates to overcome that lack of functionality. You could do this by trading swap futures, or we could see the potential for OTC swaps to trade with IMM dates," says Supurna VedBrat, co-head of electronic trading and market infrastructure at BlackRock in New York.

OTC swaps come with other operational headaches, too – some buy-side firms want to avoid the product because new documentation is being drawn up to govern clearing relationships, and the new contracts involve both legal risk and cost (see pages 53–56). It may be easier to use existing futures agreements, some participants say.

"When doing our cost-benefit analysis, we recognised early that a lot of our clients have their own trading agreements – OTC and futures documentation – which they put together at their expense, and they may not be willing to incur a similar expense for cleared OTC swaps. So, for some of our mandates, it may be useful to use other types of products, such as swap futures," says one head of derivatives operations at a large investment management firm in Boston.

So how much volume could move from OTC to swap futures? That depends in large part on what the client is getting from the OTC market and whether the futures contracts are able to deliver more or less the same benefits. Dealers say the most likely trades to migrate are plain-vanilla US dollar interest rate swaps that reference three-month Libor and have maturities of two, five, 10 and 30 years

Unhappy brokers

If a wedge of the standardised interest rate swap market does migrate to swap futures, interdealer brokers will not be happy, says one dealer. Today, brokers stand at the crossroads of the over-the-counter market, and they are hoping the same will still be true tomorrow, when OTC swaps will have to be traded on swap execution facilities (Sefs) that the big brokers are setting up – so it's not hard to imagine them being unhappy about new, listed futures contracts. "A large chunk of business that today is brokered through them will be done on exchange, away from Sefs," the dealer says.

Brokers say it's not that simple. If swap futures do become a success, trading volumes will largely be driven by dealer-to-client trading, with dealers hedging the risk using good, old-fashioned OTC swaps.

"From a generic perspective, we think that if there is any success in the swap futures space, then there is also a significant likelihood because of hedging that it will drive OTC swaps volumes as well. You always hedge into the most liquid flow and presently that is OTC swaps," says Stuart Giles, head of business analysis at interdealer broker Tradition in London.

Another broker is also not convinced swap futures will get off the ground – and agrees that if the new contracts do grow, then it will complement the existing cleared OTC swaps market.

"To get liquidity in new contracts, you need the market to embrace it immediately, and with the rules still not final for the OTC swaps market, I think these new swap futures will sit idle for six months – and I've never seen an exchange-traded product sit around and then suddenly gain traction. However, if it does succeed, I believe the markets will coexist and feed off each other," says the head of rates at another interdealer broker in London.

– mirroring the specifications of the swap futures currently being offered. These liquid, relatively standardised trades are primarily used by real-money asset managers that are predominantly looking to take bets on rates, rather than hedge cashflows – and some buy-side firms go further than Sun Capital Advisers, saying they could move their whole OTC portfolios into futures products.

But market participants say the outlook is too uncertain to forecast shrinkage for OTC volumes as a whole. One banker says a good chunk of standardised US dollar swap flow is interdealer business, and it remains to be seen whether dealers will hedge clients' futures trades with matching futures or whether they will continue to use OTC swaps. Some traders argue flow on the swap futures platforms

will actually increase the amount of hedging conducted using OTC products (see box, *Chicken and egg*).

And some buy-side firms say they see OTC swaps as the superior product. "This is not the end of the swaps market, because we believe the new rules will encourage broader participation and scalability over time. While at the beginning, participants will look to use other products such as futures because collateral and margining will take time to figure out, in the long run the new regulations will foster more growth in swaps. Another major advantage is the ability to clear the swap at different venues – that is not the case with swap futures," says James Wallin, senior vice-president, fixed income at asset manager Alliance Bernstein in New York.

A. Eris and CME swap futures comparison

	CME Group	Eris Exchange
The product	US-dollar denominated contracts expiring on IMM dates. At expiry all open positions will deliver into CME Group cleared interest rate swaps	US-dollar denominated contracts that embed the cashflows of collateralised OTC swaps, whose IMM-dated benchmarks have predetermined fixed coupons and trade at net present value
Contracts	Quarterly contracts based on two-, five-, 10- and 30-year swaps	Spot-starting benchmark swap futures (two-, five-, 10-year) and the IMM-dated forward-starting swap futures (two-, five-, 10-year). Ability to create customised swap future with tenor and rate flexibility
Contract size	\$1,000 per point (\$100,000 per contract)	One contract = \$1 million
Floating rate	Three-month US dollar Libor	Three-month US dollar Libor
Market-makers	Citi, Credit Suisse, Goldman Sachs, Morgan Stanley	DRW Trading, Getco, Chicago Trading Company, Infinium Capital Management, Nico Holdings
Margin period of risk	Two days	Five days (with potential to go as low as one day with increased liquidity)
Block trade thresholds	Two-year – 3,000 contracts, five-year – 1,500 contracts, 10-year – 1,000 contracts, 30-year – 500 contracts	Less than five years – \$50 million, more than five years – \$25 million
Potential tax regime	1256 contract	Notional principal contract (currently 1256)



"We are analysing the costs and the effect of the new regulations on swaps trading, and we expect it will end up being cheaper to trade more standardised products on exchanges"

Michael O'Brien, Eaton Vance

The asset segregation regime that has been mandated for OTC swaps – legal segregation with operational commingling (Lsoc) – could also be an advantage over futures, where protections are often seen as weaker.

In an Lsoc account, although a client's collateral can be commingled with that of other customers, the clearing member and the central counterparty (CCP) are required to keep track of each customer's assets. In the event of a double default – when the collapse of a client causes the default of the clearing member – the CCP may only access the collateral of the

defaulting cleared swap customers, and is not allowed to touch assets of non-defaulting clients.

In futures markets, customer collateral is held in a pool known as an omnibus, or 4d, account – and the CCP is able to dip into those funds in the event of a double default, leaving all the customers in the pool exposed to each other.

Some asset managers say they are not worried by 4d accounts and are willing to bear the fellow-customer risk, claiming Lsoc wouldn't have offered improved protection when MF Global collapsed last year – Lsoc customers are not protected in the event a defaulting clearing member has insufficient collateral at the point of bankruptcy.

Other buy-side firms say they will still be able to benefit from the Lsoc model when trading swap futures because they will seek to calculate margin on a net basis across their OTC swaps and their futures contracts – in that situation, futures collateral would need to be placed in an Lsoc account, because OTC swaps are not allowed to be subject to any other segregation regime.

And DRW's Wilson says he is not convinced Lsoc offers much of an advantage. "If a fellow customer blows up, then under the 4d account structure, clients' collateral is potentially at risk. Now, we clear a lot of our business at an FCM that has around \$1 billion in capital, and a client collateral pool of around \$20 billion. If a fellow customer loses \$2 billion – and for that to happen it would require a huge risk position that is not covered by the margin – it would blow through the FCM's capital and the remaining \$1 billion would get allocated among the customers, so everyone loses 5% of their money. Am I happy I've lost 5%? No. But far worse things have happened, and I think the probability of that situation happening is so low, that I was comfortable having my money in 4d accounts during the financial crisis.

"Now, compare and contrast that with Lsoc – if a fellow customer loses \$2 billion, wiping out margin and the FCM's capital, then the loss goes into the CCP, which becomes that much less safe. I'm not sure that that would be a better situation," says Wilson. ■

Chicken and egg

It doesn't require many conversations to spot a potential pitfall for swap futures contracts. Market participants say they will happily trade the product when a pool of liquidity has developed, but none will risk jumping in until they know they can get out again easily. Put bluntly, market-makers will get into the game when clients say they want to trade; clients will only want to trade if the product has market-maker support.

One dealer illustrates the problem. "It's not easy to develop a credible liquidity pool – it's not a matter of flicking a switch. We will be monitoring liquidity, and will only commit when there is enough client demand, and a lot of firms aren't even sure they want to use the product. We will not start making markets when there is nascent liquidity," says the head of US rates trading at a European bank in New York.

Asset managers are just as wary. "In the swaps market, I can call up a counterparty and I'm pretty certain of my execution costs. If I go to the futures market, then I don't have the same certainty of execution. There is an assumption that I might be saving on margin for futures versus over-the-counter cleared derivatives, but I might lose that in execution costs. In that case, you could be exchanging a reduction in margin for liquidity risk. We are very disciplined on transaction costs, and until we can get in and out of a contract without having to worry about incremental, frictional transaction costs, we won't migrate our trading," says Richard Prager, global head of trading at BlackRock in New York.

But some asset managers believe a drop-off in liquidity in the cleared OTC swap market – one potential result of the new regulatory regime – could force market participants to



Sam Priyadarshi, Vanguard

make the jump, resulting in a swift injection of liquidity into alternative products.

One source of the drop in OTC market liquidity could be the rules on swap execution facilities (Sefs), says Sam Priyadarshi, head of fixed-income derivatives at Vanguard in Philadelphia, which is currently evaluating alternative duration products such as swap futures.

"Potential problems include the proposed requirement to solicit a minimum of five quotes when trading, and the reporting methodology – including the required public reporting of bunched, or block, trades in as little as 30 minutes. The market could also fragment if the same products are tradable on multiple Sefs, and the potential for a backlog of client on-boarding at the futures commission merchants could mean many participants won't be able to trade for a period of time. All these challenges could result in participants considering a potential shift to interest rate futures or swap futures," he says.