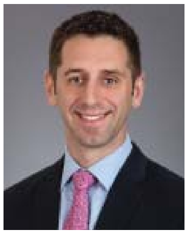
The Futurization of FX Derivatives

OTC to Remain Strong, But Regulations Will Drive Move to Futures



Kevin McPartland is head of the Greenwich Associates market structure and technology advisory service. He helps the firm's clients navigate market structure changes driven by regulation, technology and behavior shifts.

Regulatory-driven changes on the horizon will drive futures to become an important tool in foreign exchange traders' toolbox and a much bigger part of the FX marketplace.

While FX swaps and forwards received exemptions from trading and clearing requirements imposed on derivatives in other asset classes, they will still feel the impact of trade reporting requirements, anti-evasion authority, business conduct standards and Basel III capital requirements. These influences are likely to encourage a shift of some FX swaps and forwards business to futures.

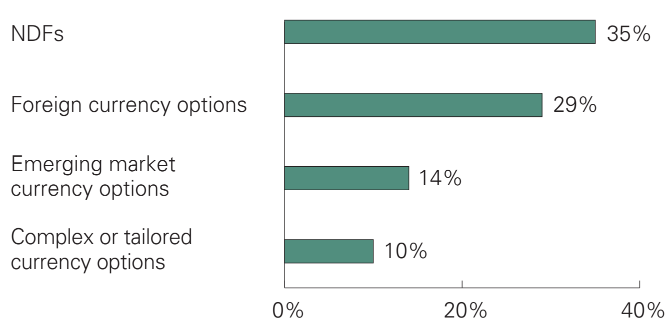
Non-deliverables forwards and FX options didn't escape the grasp of trading and clearing requirements and the high margin rates they bring. Once these rules set in, trading these products will become more expensive. Financial users of these products, which drive most of the volume, require less customization than corporate users, making it likely that they will shift some of their flow to less expensive futures.

The move of some activity to futures will require investors to rethink how they access the FX market, dealers to revamp business models to facilitate trading in a profitable way, and technology providers to offer solutions to help all market participants adapt and succeed in the new market.

Despite numerous regulatory exemptions, foreign exchange derivative markets are not shielded from major change arising out of global derivatives regulation. In fact, several transformations in these markets are already underway. The reform agenda's documentation requirements, for example, are altering the dynamic between the buy side and the dealer community. Increased capital cushions now required of major banks are impacting the cost of doing business. Reporting requirements are changing the transparency profile of the market. And, in the not-so-distant future, regulations will place trading and clearing requirements on non-deliverable forwards (NDFs) and eventually upon FX options.

Financial regulations are in many cases even more disruptive in the FX derivatives markets than in credit and rates, making at least a partial move to the well-understood futures market likely for a large segment of FX market participants.

Proportion of Buy-Side FX Traders Using FX Derivatives



Note: Based on responses from 1,736 foreign exchange users globally in 2013 for NDF and foreign currency option figures and 1,400 for EM and complex figures. Source: 2013 Greenwich Associates Global Foreign Exchange Services Study

Why Exemptions Shouldn't Overshadow Non-Exemptions

FX derivatives received a reprieve from some regulations that will greatly impact rates, credit and commodity derivatives. Examples include the following:

- The U.S. Treasury Department exempted FX swaps and forwards from the trading and clearing requirements currently imposed on credit and rate products.
- IOSCO's uncleared margin requirements leave FX swaps and forwards off the mandatory initial and variation margin list.

The exemptions, however, are far less notable than the rules FX swaps and forwards *are* subject to, particularly "new trade reporting requirements, enhanced anti-evasion authority, and strengthened business conduct standards" as explained in the U.S. Treasury's "Determination of FX Swaps and Forwards" from November 2012:

> *"[A] determination to exempt foreign exchange swaps and forwards from regulation as "swaps" under the CEA [Commodity Exchange Act] will not affect the application of other provisions that are designed to prevent evasion by market participants and improve market transparency. In particular, under the Dodd-Frank Act all foreign exchange swaps and forwards will remain subject to the CFTC's* ***new trade-reporting requirements, enhanced anti-evasion authority, and strengthened business conduct standards*** *for swaps dealers and major swap participants."*

Capital requirement rules set forth by Basel III will also impact the FX derivatives market over the next three to five years, despite the fact that FX derivatives are less capital intensive products than their fixed-income derivative cousins.

The Burden of Business Conduct Standards

While trade reporting requirements and the Commodity Futures Trading Commission's (CFTC) anti-evasion authority will impact all over-the-counter (OTC) markets similarly, business conduct standards will create some unique challenges in FX markets. FX trades are often short duration and non-leveraged, keeping counterparty risk low. As a result, many buy-side firms have willingly executed FX trades with dealer counterparties sans formal documentation, such as an International Swaps and Derivatives Association master agreement.

Enter business conduct standards, a complex set of requirements defined by the CFTC in May 2013 intended to protect the end customer. In short, the standards require swap dealers and major swap participants to have legal documentation in place with their trading counterparties that ensures communication of "scenario analyses," a mid-market price for each trade, assurances that the instrument in question is suitable given the counterparties' expertise, and other related details. While these standards may protect customers, their requirements prove quite onerous on both the dealer and the customer given the changes required from current market norms.

Additional documentation for FX swaps and forwards (defined as spot trades settling T+3 or later) is good in theory given that it takes the guesswork out of settling any default scenario. In practice, however, it can severely limit the pool of liquidity providers with which asset managers and hedge funds can transact. Seeking to avoid the operational burden and cost of documenting a large volume of trades for numerous counterparties, large buy-side firms may be forced to pick a select group of their top counterparties based on historical trade volumes and the overall relationship. This will make it difficult for smaller liquidity providers to stay in the business.

FX Swaps and Forwards

Exempt from:	• Trading and clearing requirements • Mandatory initial and variation margin
Subject to:	• Trade reporting requirements • Enhanced anti-evasion authority • Stronger business conduct standards • Cost increases from Basel III capital requirements

Business conduct rules are also effecting change in prime brokerage arrangements, with some now requiring tri-party or quad-party agreements to ensure compliance. This requires four counterparties—typically two competing prime brokers and two investors—to agree on trade terms, which is no small feat.

The Basel Effect

Basel III capital rules will look more favorably upon exchange-traded products as opposed to those traded bilaterally, encouraging banks to charge customers more for trading the latter. Once the rules take effect in FX, bilateral OTC FX derivative trades will face capital charges, higher risk weighting and credit value adjustment charges. While these costs explicitly fall to banks, it's safe to assume banks will pass along these new costs of doing business to their clients. So even for end-users exempt from CFTC trading and clearing requirements, the incentive to trade less capital intensive instruments—primarily cleared derivatives—will be strong.

The challenges posed by the aforementioned rules and standards aren't insurmountable—in fact industry-wide solutions are already in the works—but they will certainly limit the fluidity of transacting in (OTC) FX derivatives and open the door to increased use of FX futures.

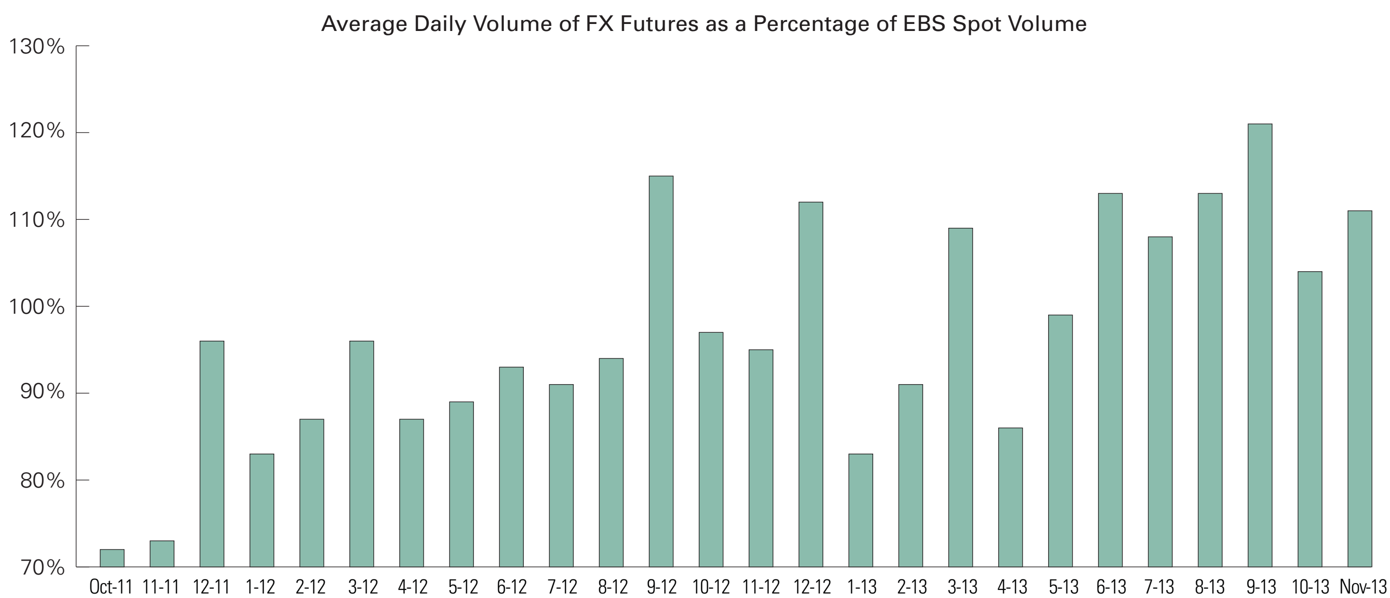
Three Reasons Why Futures Will Score a Victory in FX Derivatives

Not all OTC FX derivatives are exempt from CFTC trading and clearing requirements. Non-deliverable forwards (NDFs) and FX options were explicitly excluded from the U.S. Treasury's determination and the CFTC treats them as "swaps," leaving them susceptible to trading and clearing mandates.

On the surface it would appear the reasons for choosing FX futures over cleared FX swaps would be the same as those in credit and rate markets—lower margin and a more certain regulatory structure. But the reasons for selecting futures in lieu of cleared NDFs or options are even more compelling. Three key factors support the use of FX futures—clearing, clearing, and customization (Yes, we listed clearing twice).

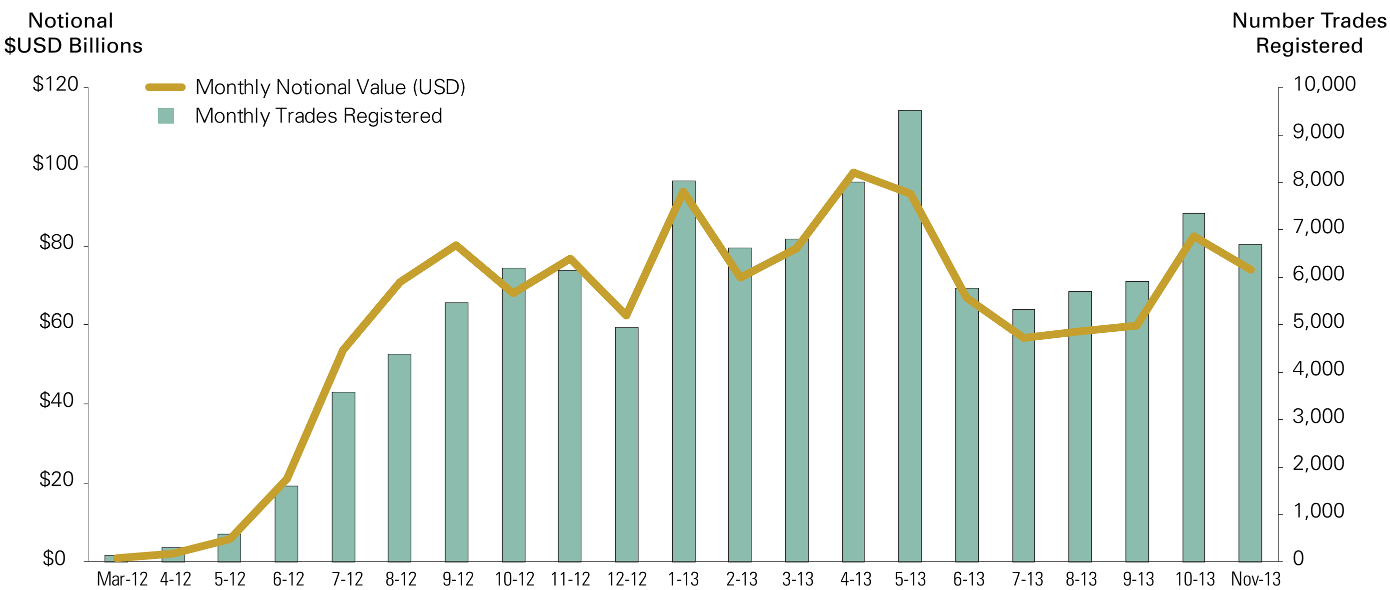
Evidence for a Viable FX Futures Market

Daily FX futures volumes are not far off from those traded in a major electronic spot market, demonstrating the viability ot the FX futures market.



Source: CME Group ©2013

Monthly Cleared FX Transaction Volume on LCH Clearnet ForexClear



Note: Transaction volumes include the two legs of each cleared transaction.
Source: LCH Clearnet

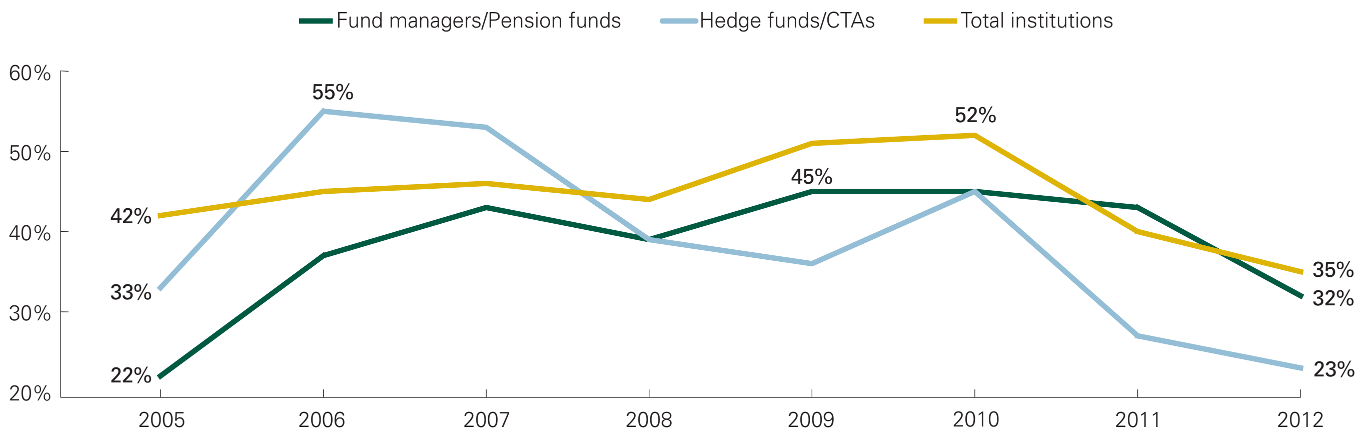
1. Clearing FX Options—Hard; Settling Cleared Options—Even Harder No one has figured out how to clear FX options. Part of the problem lies with the complexity of valuing these products. If they can't be valued accurately, it becomes difficult, if not impossible, for the clearinghouse to set margin rates that guarantee the safety of members and customers in a default situation. Greenwich Associates research shows 29% of buy-side firms use currency options, with 14% using them for emerging market currencies, which are even more difficult to value since these currencies are generally viewed as more volatile than those of developed countries.

The bigger issue with FX options clearing, however, is not about clearing at all, but about settlement. A 2012 consultation paper jointly published by IOSCO and the Bank for International Settlements (BIS), "Principles for Financial Market Infrastructures," states that clearinghouses "should provide clear and certain final settlement" for all cleared trades. While this is not particularly difficult to guarantee for fixed-income product trades, it can be quite difficult to guarantee for FX options trades in a member default scenario: Because FX options are settled in the underlying currency, clearinghouses would need to keep large sums of multiple currencies on hand to ensure settlement in any stress scenario. The costs of doing this are prohibitively high. One solution: Leave settlement to CLS, the industry standard system for settling FX transactions.

According to the IOSCO/BIS paper, however, the swaps clearinghouse must guarantee settlement itself, not outsource settlement. Eventually a formal linkage between CLS and the various clearinghouses seems likely, given the ubiquity of CLS in the FX market. But, despite ongoing discussions, that scenario could still be years away.

The result is an FX options market that remains bilateral. While some market participants might find this a positive outcome, the additional costs of trading OTC due to capital charges and margin requirements will change the economics of FX options to such an extent that they may become unusable in their current form, bringing us back to the futures market—or options on the futures market—as the most likely alternative.

NDF Usage by Firm Type



Source: Greenwich Associates 2005–13 Global Foreign Exchange Services Studies

2. Clearing NDFs—Expensive Given the complexities of clearing FX options and the Treasury exemption for swaps and forwards, NDFs are the only OTC FX derivatives seen as a likely candidate for mandatory clearing. In some ways, it makes perfect sense—the contracts are standard and commonly used to gain exposure to emerging market currencies. Unfortunately, the volatility inherent in the most actively traded NDF currencies requires clearinghouses to set margin rates that could make these contracts uneconomical for investors.

IOSCO proposed 6% initial margin for uncleared FX trades. This compares to 1% for rates trades less than two years, and 2% for credit trades less than two years. Assuming cleared swap trades are margined at about half of the uncleared rate, NDFs would face initial margin requirements of 3–4%. That is a considerable sum for a trade with a duration likely less than six months.

This is in large part why NDF clearing for the buy side has yet to take off. The cost-benefit analysis for clearing NDFs voluntarily just doesn't work. As a result, CME and ICE have scaled back their cleared NDF push for clients until sometime in 2014. LCH Clearnet has had some success clearing dealer-to-dealer trades, but they are less impacted by margin because their portfolios are filled with offsetting positions.

As was the case with FX options, trading NDFs bilaterally remains an option in the short term. But once capital and uncleared margin rules set in, the ability to trade NDFs under today's cost structure will disappear, forcing investors to either accept the higher cost of trading or look to the futures market as an alternative.

3. Customization Not Required Most OTC products came about because a client sought a customized solution, and this remains a primary reason why some buy-side firms will pay up for a cleared swap rather than use a future. In the bilateral market, NDFs are created daily with fixed durations from the effective date. Corporate end-users stand as the most likely market participants to trade NDFs, and often require customized terms to create a perfect currency hedge for goods bought or sold. Greenwich Associates data shows that 44% of firms trading NDFs are corporates.

Financial end-users such as asset managers, however, often require less customization. For example, if an asset manager needs to hedge a securities transaction in a local currency, better liquidity in short-term IMM dated NDFs make it easier to roll these contracts until the needed end date than executing a single, longer-term, customized contract. And while corporates are the biggest buy-side users of NDFs, financial end-users still drive the majority of the volume. Using the entire FX market as a proxy, financial end-users account for nearly 90% of trading volume. Multiply that by the additional 3–5% initial margin required to clear an NDF, and you can see the product's usefulness quickly diminishing.

Greenwich Associates data shows that the trend away from NDFs has already started. Whereas over half of investment firms used NDFs in 2010, at the end of 2012 only 35% used them, with hedge funds leading the pull back. To be fair, the economy's roller coaster ride over the past several years has impacted buy-side FX trading behavior as well, but with a backdrop of high margins and even higher capital charges, NDFs have taken a beating. A logical alternative? You guessed it—futures.

The Market Turns to Futures: Challenges and Opportunities

FX futures contracts have existed for years providing exposure similar to that offered by OTC contracts. For example, FX futures listed at both CME and ICE are nothing less than IMM dated NDFs with a set notional per contract. And among the major global exchanges, FX futures liquidity has steadily grown over the past few years demonstrating the market's interest in the product.

FX options and NDF market makers have every incentive to keep the bilateral markets alive and will work hard to create a cost effective business model. But regulations and new economics will inevitably move some of that liquidity to the existing futures market. Trading FX derivatives bilaterally is soon to become too expensive. No solution exists to clear FX options. Clearing NDFs will bring with it initial margin requirements that fundamentally change the economics of the product.

These changes will create both opportunities and challenges for FX market participants and providers. While all participants will do what it takes to win in the end (or at least lose little) there will be those who fare better than others in both the near and long term.

Opportunities: Exchanges Over the next two to three years, we expect buy-side spot and short-dated forward volumes to grow, swap and longer-dated forward volumes to remain steady, and NDF and option volumes to decline—all while FX futures volumes grow. A conservative 5% move out of OTC FX derivatives into futures would cause FX futures volume to grow by over 50%—a huge boon for futures exchanges.

Opportunities: Technology Providers The opportunities in FX are similar to the well-known opportunities in other asset classes (electronic trading tools, TCA, etc.) created by Dodd-Frank. The difference here is that the FX story has only just started to play out, making the playing field much greener.

Challenges Today, Opportunities Tomorrow: Investors and Corporates Investors will struggle through a tough transition during which they must implement new processes and technologies to manage the change. But in the long run they will be left with a cost effective method of hedging minus the counterparty risk.

We believe that FX futures product offerings will extend further into contracts offering more customization for those that require it. CME Europe, for example, is set to begin offering monthly FX futures which allow for more targeted hedging strategies. Customizable FX futures, similar to the model used by Eris for interest rate swap futures, are also likely. These products could prove useful for those corporates looking for hedge exemptions via perfect hedges. Remember, corporates are exempt from clearing mandates but they are not exempt from dealers passing along capital charges.

FX Futurization: Challenges and Opportunities

Opportunities	• Exchanges • Technology Providers
Challenges Today, Opportunities Tomorrow	• Investors • Corporates
Challenges	• Sell-side firms

Challenges: The Sell Side The current FX business is of critical importance, as are most OTC derivative trading operations, and moving to futures will cut the profit per trade several fold.

But it must be said that the existing OTC FX derivatives market will not go away. It is too big, too heavily used and too profitable for too many market makers to just disappear. As mentioned earlier, only a small amount needs to move to futures to make a major impact. ■

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