OPINION

DERIVATIVES: STRUGGLING INTO THE NEW ERA

NICK RONALDS
Managing Director, Equities, ASIFMA

The past few years have been challenging for the global economy but it seems as though the derivatives industry sustained more than its share of insults and injuries over the past year or so. Still reeling from the trauma of MF Global in October of 2011, exchange-traded volume went into its first nosedive in decades. Urgent regulatory requirements added intense cost and time pressures to company staffs that were already stretched. A non-clearing FCM, Peregrine Financial, collapsed in scandal. OTC derivatives struggled with complex regulatory mandates and weak volume. Perhaps the only positive for the year was that mergers and acquisitions at both the macro and micro level imply that innovation and creativity are still powerful industry drivers. That in turn suggests that the creative dynamism that has characterized the derivatives industry for so many years still has some innings to go.

Futures and options volume

Going into 2012 the exchange-traded derivatives industry was already reeling from the shock of the MF Global bankruptcy, which itself came on top of frantic efforts by every industry participant to re-engineer itself for the new regulatory regimes being ushered in by Dodd-Frank in the U.S., MiFid and EMIR in Europe, various country-specific initiatives in Asia, and the G-20 commitments for all. Then business took a dive. Trading volume was down starting in January, and got worse as the months rolled by. The year 2012 closed out with the biggest decline since the Futures Industry Association started keeping statistics in 1955—down 15.3%. It was only the third negative volume year since the era of financial futures dawned in 1972.

The carnage was across the board. All but one of the world's largest exchanges experienced volume declines, with only BM&F BOVESPA bucking the trend. Korea was knocked from the #1 perch for the first time since reaching the pinnacle a decade ago, but the reason was primarily a quintupling in the nominal size of their flagship KOSPI contract. On the other hand, China's Dalian Commodity almost broke into the ranks of the top 10 on the strength of a 119% volume surge, vividly illustrating the characteristic volatility in volume that Chinese exchanges and products have displayed over the years.

All the financial product categories suffered. The world's largest interest rate contract by volume, CME's Eurodollar contract, experienced the first decline in its history, falling over 24%, and Eurodollar options volume collapsed to less than half the prior year's. Of the 25 most active interest-rate contracts in 2011, 18 declined in 2012. For the top 25 equity products, all but two were down. For currencies, 21 of the top 25 were down. Commodities were the only bright spot: 16 of the top 25 agricultural contracts experienced increases, as did just over half of the biggest energy and base metals contracts. Precious metals were down.

EXCHANGE TRADED DERIVATIVES VOLUME BY PRODUCT, EXCHANGE, AND REGION

Product type	Region	Stock Exchange	Size	Product	2012 Volume (millions of traded contracts)	2011 Volume (millions of traded contracts)	% Change
Stock Index Options	Asia Pacific	BSE Limited	15	BSE 30 SENSEX	148	0.1	-
Single Stock Options	Americas	BM&FBOVESPA	100 shares	Petrobras PN	378	319	18.5
Stock Index Futures	Asia Pacific	Japan Exchange Group, Inc. (Osaka Securities Exchange)	JPY 100 x the level of Nikkei 225	Nikkei 225 Mini	130	118	10.6
STIR Futures	Americas	BM&FBOVESPA	BRL 100,000	Interbank Deposits (ID) futures	341	321	6.2
Single Stock Options	Americas	International Securities Exchange (ISE)		All stock options	457	431	6.0
STIR Futures	EAME	NYSE Liffe (European markets)		THREE MONTH STERLING	115	116	-0.6
Single Stock Options	Americas	BM&FBOVESPA	100 shares	Vale R Doce PNA	378	392	-3.7
Stock Index Options	Asia Pacific	National Stock Exchange of India		CNX S&P NIFTY Options	803	869	-7.6
ETF Options	Americas	Chicago Board Options Exchange	100 shares of the underlying ETF	SPDR S&P 500 ETF Trust	151	165	-8.7
Stock Index Options	Americas	Chicago Board Options Exchange		S&P 500 Index	174	198	-11.7
Stock Index Options	Asia Pacific	TAIFEX	Index Point* NTD 50	TAIEX Options	108	126	-13.8
Stock Index Futures	EAME	Moscow Exchange		RTS Index Futures	321	378	-15.0
LTIR Futures	Americas	CME Group		10-YR NOTE	259	308	-16.1
ETF Options	Americas	International Securities Exchange (ISE)		All ETF optioons	277	339	-18.2
ETF Options	Americas	NYSE Euronext (US markets)		All ETF optioons	379	476	-20.5
LTIR Futures	EAME	Murex		Euro-Bund Futures	184	236	-22.0
LTIR Futures	Americas	CME Group		5-YR NOTE	126	163	-22.8
Stock Index Futures	EAME	Murex		EURO STOXX 50® Index Futures	315	409	-22.9
Stock Index Futures	Americas	CME Group		E-MINI S&P500	474	619	-23.5
Stock Index Options	EAME	Murex		EURO STOXX 50® Index Options	281	369	-24.0
STIR Futures	Americas	CME Group		EURODOLLARS	423	560	-24.5
ETF Options	Americas	NASDAQ OMX (US markets)		All ETF optioons	357	475	-24.9
STIR Futures	EAME	NYSE Liffe (European markets)		THREE MONTH EURIBOR	179	242	-26.1
Single Stock Futures	EAME	Moscow Exchange		All stock futures	241	363	-33.4
Stock Index Options	Asia Pacific	Korea Exchange		KOSPI 200	1 575	3 672	-57.1

Source: World Federation of Exchanges

Not surprisingly given the regulatory emphasis on pushing OTC products onto clearing platforms, cleared volume for interest-rate swaps and CDS saw mostly solid increases last year. Monthly notional value of cleared IRS at the CME approached $500 billion in December from under $30 billion in January, and spiked above that in both February and August. LCH.Clearnet experienced steady growth, while IntercontinentalExchange saw growth in its U.S. cleared CDS but a decline in Ice Clear Europe.

So far this year the volume picture is improved, though mixed. Interest-rate product volumes are generally up in both the U.S. and Europe in the first quarter—with the exception of the benchmark 3-month Eurodollar contract, down another 12.5% so far on top of last year's big drop. In Europe precious metals are the only product class in the negative column so far. In the U.S. energy volumes were up sharply as of the end of the first quarter, currencies up about 12%, bonds did well, but ags and metals (both precious and base) were down.

ONE BIG LESSON FROM THE BANKRUPTCIES OF MF GLOBAL AND PEREGRINE WAS THAT CUSTOMER PROTECTIONS FOR FUTURES CLIENTS WERE NOT AS STRONG AS EVEN INDUSTRY VETERANS HAD THOUGHT.

Big Deals

Two ambitious attempted mergers fell through in 2011, that between the London Stock Exchange and TMX group and the Singapore Exchange's attempted bid for of ASX. Then early last year the proposed merger between NYSE-Euronext and Deutsche Börse's Eurex Group was blocked by regulators. It seemed like the decades-long era of exchange mergers and consolidations was finally over. Not so fast: In June the Hong Kong Exchange won its bid for the London Metal Exchange, and in December, InterContinental Exchange announced plans for its takeover of NYSE Euronext.

Both deals were driven by powerful logic. HKEx traded no commodities but is situated at the doorstep of the world's biggest commodity consumer, China. The merger turns HKEx into a commodities powerhouse overnight. According to the Financial Times, China accounts for 40% of commodity consumption but makes up just one-fifth of trading on the LME, suggesting generous room for growth. The LME was the last mutually owned of the world's major exchanges, and if the precedents are anything to go by, public ownership will bring with it big changes—including volume growth and product extensions. The UK regulator gave its approval to the deal in December of last year, so it's full steam ahead.

ICE Chairman and CEO Jeff Sprecher also had good reasons. In an interview in the March issue of Futures magazine Sprecher said the combination with NYSE Euronext would provide multiple synergies: a major leg up into the rates products market via the LIFFE unit in London; and an entire new product class for ICE—equities—at a time when squeezing capital and collateral efficiency out of every nook and cranny is of highest urgency for every player in the industry. The NYSE-Euronext portfolio is sprawling and complex, and it will be interesting to see what structure will emerge. CEO Sprecher has indicated publicly that Euronext, the European group of equity and derivatives exchanges, will be one spinoff, and NYSE Euronext has said the Matif wheat futures unit would be sold to satisfy regulators. The deal still needs approval from EU and some individual country regulators.

Have we now seen the end of big deals in the exchange space? All the major exchanges have been bought or sold once already. Even the staid Japanese exchanges, the Tokyo Stock Exchange and Osaka Securities Exchange, have merged to form JPX, although the consulting firm Celent says the combination won't do anything to spur "disruptive innovation" in the Japanese market. The tendency in some parts of the world to regard exchanges as national institutions and off limits to foreign buyers will likely be a limiting factor for additional major acquisitions in the exchange space. So has the era of big exchange mergers come to a close? Who knows, but as the history of NYSE-Euronext illustrates, no law limits an exchange to just one merger, small or big.

New Exchange Start-ups?

Speaking of mergers, what about new entrants? Could one unintended consequence of the new regulations be the creation of new start-up futures exchanges? Interdealer broker GFI Group submitted an application to open a proprietary U.S. futures exchange in early April. Rivals Icap and BGC Partners were reportedly considering doing likewise. BGC, another interdealer broker, is boosting its stake in ELX, a futures exchange launched in 2009 to compete with CME Group's interest rate products. BGC is examining whether the new regulatory environment creates opportunities, according to reports. Icap, the world's largest interbank broker, acquired PLUS Stock Exchange PLC last year. They rebranded it as ISDX and said they planned to list futures, though no date has been given.

The motivation for all these moves is both the increased regulation of OTC derivatives and the regulatory ambiguity for OTC products. Creating a proprietary futures exchange could serve to retain business that might otherwise move to the big, established exchanges like CME or ICE.

Little Deals

Another area of active M&A has been has been between financial technology firms. In 2012 there were 92 deals involving one trading technology company financing, buying, or merging with another trading tech company, according to Steve McLaughlin, Managing Partner of Financial Technology Partners, an investment bank focusing exclusively on the financial technology sector. Of the 92, 30 involved exchanges and their platforms, and another 32 trading software and connectivity firms. (The numbers exclude deals where one party is a trade tech firm but the other is another type of service provider.) What's driving the churn? The complexity of market structures, globalization, the diversity of market venues and trading models have led to increased specialization of technologies to keep customers and regulators happy. The dynamic of the market place gives rise to entrepreneurs who create specialized products that meet a need originating from customer demand, new technologies, or regulatory requirements. These niche products then get bought or merge with existing companies to provide clients with more comprehensive solutions. Some examples include Knight Capital's purchase of Penson Futures, Markit buying Casis, a company specializing in enterprise data management, Equinix buying Asia Tone, Tullett Prebon buying Elevation, NASDAQ OMX buying NOS Clearing, and so on. Of course, the big boys of the exchange world are also in the game to keep their technology and services current. Over the past year or so the London Stock Exchange, CME, TMX Group, NYSE Euronext, ICE, Deutsche Börse have all snapped up smaller exchanges or tech companies.

Customer Protection

One big lesson from the bankruptcies of MF Global and Peregrine was that customer protections for futures clients were not as strong as even industry veterans had thought. Fellow-customer risk, investment risk (investments by a clearing member), operational risk and fraud risk entered the common vocabulary.

An industry self-examination followed and steps to strengthen customer safeguards started being implemented last year. These include improved standards for internal control policies and procedures of FCMs; clearer separation of duties among individuals with compliance responsibilities; enhanced record-keeping and reporting; and a requirement that a broker's CFO sign off whenever an FCM seeks to withdraw more than 25% of its excess funds from the customer segregated accounts in any day. The Futures Industry Association has also announced a number of initiatives to give regulators faster and more accurate data on customer funds. Self-regulatory organizations such as exchanges and in the U.S., the NFA, are implementing measures to get direct online access to the bank accounts that hold FCM customer margin funds. Some brokers have started providing customers with online "portals" to see details of exactly how their collateral for futures and swaps are being invested and where they're held.

Other measures, such as the creation of an insurance fund to protect futures customers and changes in the bankruptcy code, are still being discussed and in the latter case, will need legislative action. Another possibility is to move the margin funds from the broker to the clearing house. Client fund segregation at the individual customer level is also a possibility. For the moment, however, a modified form of fund segregation has already been adopted for swaps. Called "legally separated but operationally comingled" (LSOC), it seeks to ensure that seg funds are managed so that funds of a customer with margin excess are not used to cover another customer's margin requirements. LSOC requires more detailed seg funds monitoring and accounting by both the FCM and the clearing house.

Before MF Global, the U.S. futures industry could say that no customer had ever lost a penny due the bankruptcy or default of a broker. Outside the U.S. as well the safety of margin funds has also long been rightly regarded as virtually bullet-proof. In fact, the financial integrity of the centrally cleared model with daily mark-to-market is the main reason regulators around the world are pushing OTC products onto exchange platforms. The futures industry suffered a grievous blow with MF Global, and all participants have suffered the consequences. They don't want that to happen again.

Regulation and Extraterritoriality: Long Word, Big Problems?

The financial crisis led to major new legislation and reform commitments around the world: Dodd-Frank in the U.S., the Markets in Financial Instruments Directive (MiFID) and European Market Infrastructure Regulation (EMIR) in Europe, the Basel III Capital Accord reforms and G20 commitments for the world. As legislation underwent the transition to regulation and market participants began assessing their impact, a word borrowed from history and politics made its way into the financial lexicon: extraterritoriality. Regulations in one jurisdiction are hitting not just OTC but exchange-listed products and CCP's in jurisdictions well beyond that of the originating regulator. In short, their reach is extraterritorial. One example: the reforms call for clearing liquid OTC derivatives in CCPs if they are not converted outright into futures. But whose CCP? It's still

AT STAKE IN THE SATISFACTORY RESOLUTION OF THE EXTRATERRITORIALITY REGULATORY CONFLICTS AND THE IMPOSITION OF TRANSACTION TAXES IS ULTIMATELY THE ABILITY OF MARKETS TO RAISE CAPITAL, MANAGE RISK, AND FUEL MUCH-NEEDED ECONOMIC GROWTH AROUND THE WORLD.

not clear, but if conflicting rules are overcome another outcome could be the clearing of products on local CCP's with minimal liquidity.

The Dodd-Frank Act says that activities outside the U.S. could be subject to its terms if they have "a direct and significant connection with activities in, or effect on, commerce in the United States" or "to prevent the evasion" of the DFA. Considerable confusion has arisen, for example, over the circumstances under which an entity does or does not qualify as "U.S. person" for purposes of the law. Is it a non-U.S. branch of a U.S. person? A non-U.S. subsidiary or affiliate of a U.S. person or guaranteed by a U.S. person? A non-U.S. swap dealer who exceeds the de minimis level of swap activity? Etc.

Industry groups and regulators in affected jurisdictions have taken notice. In February of last year six leading financial industry trade associations wrote a letter to the Commodity Futures Trading Commission (CFTC) expressing their concern about U.S. swap dealer registration requirements on firms engaged in the global swap market. The requirements would require "costly, disruptive, and time-consuming" restructuring of their global operations, the letter said. Another group of trade associations wrote a letter to the U.S. Treasury Secretary Geithner and EU Commissioner Michel Barnier setting forth their concerns that aspects of the regulatory reforms may be duplicative, incompatible or conflicting, distort competition or reduce customer choice, and have unintended impacts.

The extraterritoriality extends to post-trade reporting requirements as well as regulation of transactions and market participants. The European regulation EMIR includes extraterritorial provisions affecting non-EU CCPs that admit EU entities as clearing members. Non-EU CCPs may need to apply for recognition by the European Securities and Markets Authority. A report issued in June of last year by a coalition of trade associations noted that "the financial crisis has forced national regulators to undertake reforms that are broader in scope than necessary" which "can lead to regulation that is inappropriately extraterritorial in effect."

Asian markets are potentially among the most in danger from extraterritoriality because Asian markets are more fragmented than the giants of the U.S. and E.U. In August financial regulators of Hong Kong, Australia, and Singapore wrote to CFTC Chairman Gensler expressing concerns that CFTC regulations would compel non-U.S. persons to comply with overlapping and conflicting regulations. The Bank of Japan sent their own letter to the CFTC in August, and the governments of the Japan, U.K., EU, and France sent another in October urging the CFTC to "take the time to ensure that US rulemaking works not just domestically but also globally." Hong Kong regulators also wrote a letter that month expressing concern that CFTC registration requirements would "result in such institutions having to meet overlapping, and possibly conflicting, regulations in the US and their home jurisdictions" and in the process undermine reform efforts in their home jurisdictions.

"Futurization" is another long word surrounded by discussion and argument. In part because of the complexity and ambiguity of the Dodd-Frank regime, some OTC products are being converted into futures. Last October Intercontinental Exchange listed 800 new energy futures contracts that had previously been cleared swaps. CME listed about 500 mostly energy-related contracts in a similar move. At a roundtable discussion on futurization in March hosted by the CFTC, the discussion centred on the degree to which greater regulatory stringency for OTC products was justified. Supporters of futurization said that the greater transparency and operational advantages justified certain breaks for futures such as lower margins. Critics of futurization argued that OTC products were being put at a disadvantage merely because of their classification rather than their underlying risk characteristics. Bloomberg even filed a lawsuit against CFTC in April, arguirg that certain rules applying to swaps are arbitrary and discriminatory. Needless to say, consensus on futurization is not in sight.

Extraterritorial Financial Transaction Tax

A major initiative in Europe with extraterritorial reach is the planned EU Financial Transaction Tax (FTT). Some European countries have already implemented FTT's, France in August of last year, Hungary in January, and Italy just last March. The European FTT would go into effect in January 2014 and has a major new feature compared to prior FTT's: it would apply not only to instruments traded within Europe itself, but to instruments anywhere in the world transacted by a European individual or entity. Trades in New York, London, or Hong Kong by European investors would be subject to the tax of 0.1% (10 basis points), orders of magnitude larger than existing exchange and institutional brokerage fees

FTT's are nothing new. Many countries have had them at one time or another, and some still do. Proponents of FTT's say they will raise substantial revenue and reduce market volatility. Sceptics say revenue will be disappointing, volatility could increase, the cost of capital would rise, and collateral would become expensive and scarce.

Given all this historical experience with FTT's, do we have evidence one way or the other? Yes indeed. For example, the Bank of England published research in 1997 on the impact of their transaction tax (called a "stamp duty") on the level and volatility of U.K. equity prices. They found no reduction in volatility. The report cites a number of other studies on the impact of FTT's on volume. A study of Swedish transaction taxes found that "a one percentage point increase in the [Swedish Transaction Tax] leads to a decrease in turnover of between 50% and 70%."

The economist Christopher Culp published a study in 2010 on the impact of transaction taxes starting with a Japanese FTT introduced in 1953 and including the experiences of Sweden, the U.K., China, and India. He finds that even a small FTT "could result in substantial declines in asset values" and "divert trading to untaxed jurisdictions or out of financial markets altogether". Do they at least raise revenues for governments? He says "the imposition of FTTs is unlikely to generate a significant revenue.

The experience of France, Hungary and Italy in recent months does nothing to refute these conclusions. Credit Suisse wrote in a research note dated March 8 which says that small stocks on French markets suffered the biggest volume declines and that volatility has increased, "particularly at the close." London's financial newspaper City AM notes that France raised less than a third of the revenue it expected from August through November. Hungary, which imposed a tax in January, has raised less than half the projected amount so far. With trading down almost 40% in Italy as of early April, it's a safe bet that they too will fall short of revenue targets.

The recent French and Italian FTT, and the planned EU tax, are historically unprecedented because their reach is global. Aside from the question of their efficacy, they raise new questions about how the taxes should be collected and by whom.

Perhaps the most important question, and one that can get overlooked in the discussions of the FTT's impact on volume, volatility, and revenue, is economic. FTT's raise the cost of capital. Is that a good thing at a time when the global economy is already fragile?

Everyone recognizes the urgency of avoiding the possibility of financial crises. There's also little disagreement that the ultimate goal of regulatory reform is to strengthen, not diminish the crucial role of financial markets in allocating capital efficiently and intermediating risk. At stake in the satisfactory resolution of the extraterritoriality regulatory conflicts and the imposition of transaction taxes is ultimately the ability of markets to raise capital, manage risk, and fuel much-needed economic growth around the world.

About Nick Ronalds

Nick Ronalds is Managing Director of ASIFMA's Equity Division and works closely with ASIFMA's Equity Committee to address all ASIFMA initiatives involving equity markets and products in Asia.

Nick joined ASIFMA from consultancy RhoFinancial where he worked with clients seeking to develop their presence in Asia's exchange-traded derivatives markets. While at RhoFinancial he developed and led FIA Asia to become the leading voice for the exchange-traded derivatives industry in the Asian region.

Prior to RhoFinancial Nick held various roles in the industry such as Managing Director of the Chicago Mercantile Exchange's (CME) Asia office and Senior Vice President, Global Markets for exchange-traded derivatives at ABN AMRO Securities. Nick is a CFA Charter holder and has written articles for publications ranging from International Financing Review and Futures Magazine to Nihon Shoken Shimbun and Caixin. He co-authored the Chapter on Chinese futures markets for The Intelligent Commodity Investor (Risk Books, 2007).

Timothy Wu assisted with research for the article.