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# Bringing Back Market Transparency

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BY PETER GOLDER, HUSSEIN SEFIAN, AND DAVID WYATT

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**F**or a year and half after the financial market downturn in 2008, the popular and political impetus for increased financial-services regulation focused primarily on wholesale and investment banks — especially on bankers' pay and the “too big to fail” problem. At the same time, however, regulators around the world were also studying the rapid rise of alternative trading venues (ATVs) such as multilateral trading facilities (MTFs) or “dark pools” (which serve as repositories of liquidity where trades can be executed in an anonymous fashion) and internal crossing networks. These new types of market infrastructure arose in response to regulatory changes between 2006 and 2008 that aimed to increase competition in global capital markets, such as the European Union's Markets in Financial Instruments Directive (MiFID) and the U.S. Securities and Exchange Commission's Regulation National Market System (Reg NMS).

Although competition has increased and trading costs have come down significantly over the last few years, regulators have become concerned about the fast pace of change. The rise of ATVs has resulted in a lack of transparency not only in the nature of trading itself, but also in the clearing and settlement of trades. This makes it difficult to get a holistic view of overall risk in the system. In the wake of the dramatic, record-setting volatility that upset the markets over the last 18 months,

it seems likely that regulatory attention on trading institutions and infrastructure in general — and ATVs in particular — will increase significantly.

The changes in the trading and financial-markets infrastructure tend to be little understood outside the financial-services industry. They include, for example, the increasing prevalence of algorithmic trading (in which computer programs determine and execute trades automatically) and over-the-counter (OTC) derivatives trading. The ability to execute trades in a much shorter period of time together with significant decreases in trading costs have led to a rapid increase in the volume of what is known as high-frequency trading — a special class of algorithmic trading whereby a software algorithm initiates orders based on information received electronically, much faster than human traders are capable of processing the information they observe.

The advent of ATVs is both a cause and an effect of these changes. ATVs were started by banks and large broker-dealers to execute trades in a more cost-effective manner; they scan their order books electronically to match buy and sell orders for institutional clients and execute the trades themselves via internal crossing engines without having to route them directly to a traditional exchange, thus avoiding the associated exchange fees. A number of ATVs also offer clearing and settlement arrangements that aim to lower the considerable

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costs associated with these activities in Europe, and to bring them more in line with the lower costs — as much as 10 times lower — found in the United States.

There are currently between 10 and 20 significant MTFs, including Chi-X, BATS, and Turquoise (which was acquired by the London Stock Exchange in late 2009). These new entities now account for significant shares of trading volume; the larger ones, on some days, can each account for more than 10 percent of total trading in an international marketplace and up to 40 percent of individual shares' volume on a given day. The MTFs are also expanding globally, from their initial footholds in Europe and the U.S. to Asia, Australia, and South America. The growth of ATVs parallels the rise of algorithmic trading and internal crossing networks, which enable institutional traders to exploit market inefficiencies or divide large trades into smaller trades. Accordingly, as the volume of trading has increased, the average size of a trade has fallen dramatically.

The three main advantages of off-exchange trading that ATVs offer institutional investors are lower transaction costs, speed, and anonymity. Trades are executed almost instantly (literally — they are often accomplished in one thousandth of the time it takes for an eye to blink), allowing investors to buy or sell large blocks of securities without moving the stock prices to their disadvantage. In addition, investors and traders can trade anonymously to avoid speculation about large trades that financial institutions are executing on behalf of clients or themselves. ATVs also provide far lower transaction costs than traditional exchange-based trading, because they can be operated with small staffs and less infrastructure.

A prevailing sentiment among many market partic-

ipants, in particular institutional investors on the buy side and regulators, is that the proliferation of ATVs is to a large extent counterproductive. There are two main reasons. First, the decline in market transparency is creating a need to centralize the price aggregation function formerly performed by traditional securities exchanges. Second, the proliferation of ATVs has tended to increase counterparty risk at the settlement and clearing stage in the event of market disruptions. Several new regulatory proposals have been introduced to address these concerns.

These regulatory changes are likely to result in a reshaping of the markets that will affect banks, traders, and investors — as well as the ATVs and the securities exchanges themselves. But there is also a danger that the specific changes could have negative unintended consequences, ultimately impairing the overall effectiveness of markets and increasing costs for investors unnecessarily. To avoid this, we believe that regulators should approach the problem holistically. As they do so, five essential questions need to be considered by all the parties involved.

**1. Why has transparency been impaired?** Before the rise of ATVs, traditional securities exchanges performed the roles of transaction aggregators and dispersers of price information. There were fewer than half a dozen exchanges that mattered, so bankers and traders could easily monitor them. The introduction of ATVs gave rise to increased concerns of regulators and other market observers about whether these facilities' off-exchange trades were being revealed and reported, in a timely manner, on the consolidated tape, and whether trades were in fact being ultimately made public. The market sentiment is that the proliferation of ATVs has

clearly reduced overall transparency. At the very least, there is a need for new structures or new players to aggregate prices and increase transparency.

This became especially clear during the markets' episode of unusually high volatility in early May 2010. Prices of some financial instruments gyrated wildly, with stock prices of blue chip companies moving up and down by dozens of percentage points in the space of a few minutes. Investors were baffled; some of the ATVs were themselves so unsure about the real level of prices that they ceased trading altogether. Weeks after the events, there was still no common understanding about what had in fact gone wrong. Well-designed initiatives to improve the transparency of ATV trading and the subsequent clearing and settlement thus seem like a sound idea — through, for example, a real-time price consolidation/discovery mechanism and the establishment of a European Central Counterparty Clearing along the lines of the Depository Trust & Clearing Corporation (DTCC) in the U.S.

**2. Would limiting the proliferation of ATVs, and moving more trading to traditional exchanges, decrease the overall risk in the markets?** The answer to this question is less clear-cut. The original idea in encouraging new trading entities was that they would increase competition and overall market liquidity. Those two objectives seem to have been reached — at least when the markets are operating normally. But the market disruption in May revealed that liquidity problems could arise quickly during periods of high volatility and be compounded by the lack of transparency.

Another concern that regulators have raised is that the prevalence of ATVs has increased counterparty risk at the clearing and settlement stage. This is an important part of the trading value chain that often receives less attention than the more visible activity of buying and selling. The danger is that in the event of sudden market moves — or a market breakdown — it might be possible that investors and traders would not have sufficient information about the counterparties with whom they are dealing, which would further increase counterparty risk.

Fears about counterparty risk may have played a role in discouraging trading during the period of high volatility in May, during which some market participants feared that a mechanical or computer error might have distorted trading. Market participants are also still mindful of the losses incurred after the collapse of Lehman Brothers in 2008. This may add impetus to

regulators' calls for consolidation of off-exchange (OTC and ATV-based) and dark-pool trading — and for potentially combining many of the MTFs and moving their clearing and settlement activities onto one or more exchanges. In the U.S., the DTCC performs the central clearing and settlement function, but there is no equivalent in Europe at present.

Consolidation, however, could also be counterproductive. Concentrating trading and clearing and settlement activities onto a few, or even onto one, provider could have the unintended effect of increasing counterparty risk for investors, because the exchange itself then becomes, in effect, the counterparty. It is thus necessary to balance the need to find a cost-effective solution to minimize counterparty risk against the need to maintain a viable trading and clearing/settlement environment. It's worth remembering that in the Lehman Brothers failure, many of the repercussions arose because a number of financial institutions and traders were dealing directly with Lehman Brothers, which had, in effect, concentrated the counterparty risk on a single entity.

**3. What are the implications for wholesale and investment banks?** As trading has become more competitive, bankers have benefited from increased access to a widening selection of trading venues, access to a wider range of asset classes, and falling transaction costs. In addition, market liquidity was increasing, and risk seemed to be decreasing, as a result of standardization and reduced human intervention. But at the same time, bankers needed to seek out highly efficient technical solutions to take advantage of the more sophisticated trading infrastructure. The need to make improvements in this area will continue. These technology-driven initiatives may also provide opportunities for banks, because larger firms can adapt better, and may also be able to afford to build efficient trading engines for other, smaller organizations.

Regulatory initiatives that tend to lessen competition, however, would compel bankers to become even better at assessing and managing risk, as counterparty risk could become concentrated in fewer entities. They may also need to accept that the favorable bid/ask spreads that they have become accustomed to may be adversely affected by the imperative to increase overall stability in the system — which would consequently have an impact on the business model of many financial institutions (i.e., through reduced profitability of certain trading desks).

**4. What are the implications for exchanges?** For the “traditional” exchanges that hold the incumbent position in securities trading, the shift in volume to ATVs has posed a challenge — not just to their market positions, but to their very business models, including their revenue models and cost structures, their functionality, and thus the degree of vertical integration that they employ. The exchanges have been responding by entering the ATV space to compete in other markets (such as clearing and settlement), as well as expanding into new geographies, either by establishing their own subsidiaries or through M&A, such as the LSE’s acquisition of Turquoise.

The rise of ATVs and the decline of the exchanges’ previous exclusivity has made efficiency and innovation crucial for the exchanges’ survival, and made it imperative that they be able to operate with lower cost structures.

For the exchanges, fragmentation and competition has meant that liquidity is dispersed across many more trading and clearing and settlement venues, which will require improved risk management throughout their value chains. Given the large number of execution venues, some sort of consolidation seems inevitable, at least in the developed markets, though further proliferation in the developing markets seems likely. The exchanges may also have opportunities to form partnerships or ventures with banks that have not built their in-house capabilities for internal crossing engines or for engaging in algorithmic trading.

**5. Will the regulatory changes result in an optimal playing field for bankers, traders, ATVs, and exchanges that is level for all participants?** The introduction of ATVs and the consequent fragmentation of trading to many different market entities has lowered costs for bankers and traders, but also raised questions about whether these new, smaller players have sufficient capital to absorb potential losses, creating concerns about coun-

terparty risks and the robustness of the clearing and settlement process. Already, regulators are pushing for higher capital standards and other safety and soundness measures, such as the Obama administration’s financial reform legislation, the E.U.’s Capital Requirements Directive III, and the G20’s Basel Accord III.

An international regulatory regime that pushes back towards consolidation of trading venues could, as noted above, exacerbate these risks by concentrating counterparty risk in too few places. The sweet spot, for both industry players and regulatory authorities, is to have the optimal number and size of trading venues and organizations that best meets the needs of all market participants in an internationally coordinated manner to avoid regulatory arbitrage. The task for bankers, ATVs, and exchanges will be to carefully explore and determine their future positioning, to ensure that their business models are suitable for the changing market environment.

As all the stakeholders in the global financial system debate specific measures to fix the flaws in trading that have become apparent, they will need to be mindful of the larger goal: Creating a robust capital markets infrastructure that protects public-sector interests while allowing private-sector businesses to flourish. This will require some restraint on the part of regulators, as well as a willingness on the part of bankers, traders, and exchanges to balance their impulse for maximizing profits against the need for collective trust and security. +

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