



● MADHYAM BRIEFING PAPER ●

Taming the Shadowy World of Dark Pools

After operating in the shadows for more than two decades, the murky world of dark pools is coming into the light. On July 1, 2014, the Financial Industry Regulatory Authority (FINRA), independent securities regulator of the US, imposed a fine of \$800,000 on Goldman Sachs for failing to ensure that trades in its dark pool trading system (called SIGMA-X) took place at the best price.

The FINRA found that more than 395,000 mispriced trades were executed in SIGMA-X in an eight-day trading period from July 29, 2011 to August 9, 2011. The FINRA has alleged that Goldman Sachs “failed to establish, maintain, and enforce written policies and procedures that were reasonably designed” to prevent such trades from happening. In settling the matter, Goldman Sachs neither admitted nor denied the charges.

Would an \$800,000 fine on Goldman Sachs act as a deterrent to stop predatory behavior and unethical business practices? The answer is No. The fine is not even a slap on the wrist of Goldman Sachs which has a market capitalization of \$75 billion. The bank may consider this small fine as a transaction tax and would return to business as usual.

On June 25, 2014, the New York Attorney General Eric Schneiderman filed a civil lawsuit¹ against Barclays’ dark pool (called Barclays LX) for conducting “systematic fraud and deceit” against its clients which include big institutional investors and pension funds. “The facts alleged in our

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complaint show that Barclays demonstrated a disturbing disregard for its investors in a systematic pattern of fraud and deceit...Barclays grew its dark pool by telling investors they were diving into safe waters. Barclays' dark pool was full of predators – there at Barclays' invitation," Mr Schneiderman said. He also claimed that Barclays removed the name of a high frequency trading (HFT) firm engaged in predatory behavior in an advertising document meant for its clients.

Both these regulatory actions have shed light on the shadowy world of dark pools where stocks worth billions of dollars are traded every day.

What are Dark Pools?

Dark pools are private trading platforms where trading of stocks is electronically conducted outside stock exchanges. In public exchanges (e.g., New York Stock Exchange of the US and National Stock Exchange in India), bid and offer prices are displayed and information about a share transaction is reported after the trading.

In contrast, dark pools are run in total secrecy and trading is not transparent to the ordinary traders or public. The trades conducted at dark pools remain confidential even to its participants. At dark pools, the prices at which shares are offered are not visible to anyone. The price of shares is only revealed after the trade is executed.

There is no public disclosure about the activities, market participants and rules governing the dark pools. Unlike public exchanges, dark pools are not regulated and supervised by regulatory agencies. For more than two decades, dark pools have been operating outside public oversight and scrutiny.

Dark pools emerged in the late 1980s when the Securities and Exchange Commission of the US (SEC) allowed broking companies and institutional investors to trade big blocks of shares among themselves to minimize the impact on prices. The rise of algorithmic trading coupled with a lack of regulations have contributed in the proliferation of dark pools as market participants prefer trading through such opaque platforms offering lower transaction fees than "lit" public exchanges.

Currently bulk of their business is generated by high frequency trading firms. Dark pool firms turn to HFT firms to generate higher trading volumes. The owners of dark pools decide which investors will be given access at these venues and at what price.

The Cream of Global Finance and Dark Pools

The cream of global finance is involved in operating dark pools. The world's biggest dark pools are run by high and mighty investment banks.

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Besides investment banks, Bloomberg LP (the parent company of Bloomberg News agency) also runs a dark pool, Bloomberg Tradebook.

Dark pools are a significant part of daily stock trading in the US and other mature markets even though the exact size of share trading conducted by dark pools is not known as they are not obligated to share their trading data.

According to Tabb Group (a data research firm), an average of 910 million shares were traded each day at dark pools in February 2014 in the US alone – almost 14 percent of country's total stock trading volume.

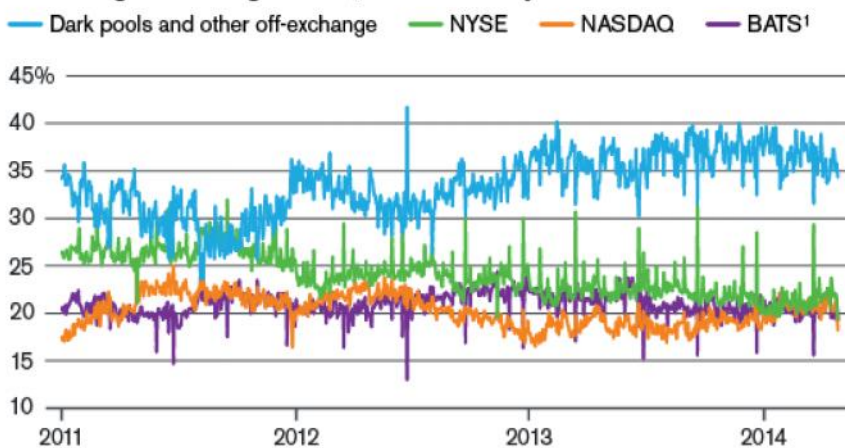
Other market estimates show a higher proportion of US stock trading in dark pools. According to Bloomberg data, dark pools and other forms of off-exchange platforms currently account for almost 40 percent of US equity trading volume based on daily close (see graph below).

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Darkness Rising

Percentage of trading volume, based on daily close



1 – Bats Global Markets Inc. merged with Direct Edge Holdings LLC on Feb. 3. Before that date, Bats trading volume includes Direct Edge volume.

Source: Bloomberg, 2014.

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The dark pools' lack of transparency makes them vulnerable to predatory trading practices by HFT firms.

In Europe, the volume of shares traded at dark pools is growing fast, especially in major trading centers like London, Paris and Amsterdam. Currently, dark trading accounts for nearly 8 percent of total equity trading in Europe. According to European Dark Trading report² by Fidessa (released in October 2013), the value of stock traded at dark pools totaled €207 billion in the six-months period (April-September 2013), up from €143 billion a year ago.

Over the years, it has been observed that dark pools are no longer dealing with only big orders. Even small orders (100 shares) are also being traded in the dark pools. In the US, for instance, the average order size was 430 shares in 2009. In June 2013, it was just 200 shares.

The Growing Darkness

Of late, there has been a tendency among big dark pool firms to become even more “darker” by not making public any data related to their trading platform. In April 2013, Credit Suisse (running the world’s largest dark pool - Crossfinder) announced its decision to stop disclosing the amount of trading volume on its platform. Earlier, such data was provided by Credit Suisse to two data research and consultancy firms – Tabb Group and Rosenblatt Securities. Some other big dark pools have also stopped sharing of trading data with these research firms. At present, only 22 dark pools (out of total 45 in the US) report volume data to Tabb Group.

Few would dispute that the potential of market abuse is enormous in opaque and unregulated stock trading. A lack of transparency endangers financial stability given the fact that stock markets are more susceptible to manipulation. Market transparency is sine qua non for robust and efficient stock markets.

The fact that dark pools’ lack of transparency makes them vulnerable to predatory trading practices by HFT firms is well-documented. Several recent episodes (such as Pipeline Trading Systems) have revealed how market abusive practices are carried out in dark pools. The overall market transparency may suffer if large-scale trading of stocks takes place in dark pools which do not display orders.

Wider Policy Concerns

The proponents of dark pools extol their efficiency and argue that such platforms have led to lower transaction costs and reduced market impact. But the proponents too often overlook the fact that dark pools raise significant market structure policy concerns which need to be addressed.

There is a growing concern among regulators that the large-scale migration of trading volume to dark pools may harm the normal process of price discovery (i.e., supply and demand determine prices) in stock

markets. The European Commission³ (in 2010) and the International Organization of Securities Commissions⁴ (in 2011) have separately raised regulatory concerns over the role of dark pools in inhibiting price discovery.

A survey conducted by the CFA Institute Centre for Financial Market Integrity in 2009 found that 70 per cent of respondents regard the operations of dark pools as either “somewhat” or “very” problematic for price discovery and for market volatility.

An important issue that very often gets overlooked is that dark pools use market prices discovered on the public exchanges. The overall market quality may also erode due to reduced trading in the public exchanges.

The Regulatory Responses

As their trading volumes have increased substantially in the many mature markets, dark pools are receiving greater attention from the stock market regulatory authorities. In Canada and Australia, the regulatory authorities have introduced new rules to curb the growth of dark pools by requiring that off-exchange trades offer a better price than a public exchange or be of a minimum tick size.

Among the EU member-states, Germany was the first one to put restrictions on dark pools and HFT trading by introducing a new law called the High-Frequency Trading Act in May 2013. Under the Act, all market participants engaged in HFT will be registered and monitored.

Under the European Commission’s Markets in Financial Instruments Directive (MiFID II) rules, policy makers have proposed two separate limits (a 4% and 8% volume cap for stocks traded on dark pools in the EU) to ensure that substantial trading occurs on “lit” platforms rather than anonymous dark pools.

In June 2013, the Australian Securities and Investments Commission (ASIC) tightened rules to fill the regulatory gaps in order to prevent potential breaches of market integrity rules as ASIC uncovered some practices by HFT traders that require further controls. The ASIC took regulatory measures despite a limited role of dark trading and HFT trading in the Australian stock markets. In February 2014, Hong Kong Securities and Futures Commission (SFC) proposed comprehensive rules to strengthen the regulation of dark pools operating under its jurisdiction.

The SEC is Falling Behind in Regulation

In contrast to other regulatory authorities, the SEC of the US is following a go-slow approach in introducing a ‘trade-at’ rule, long demanded by the public exchanges and some academics. A ‘trade-at’ rule would

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compel dark pool operators to route trades to public exchanges, unless they offer significant price improvements. However, the introduction of a ‘trade-at’ rule is strongly opposed by a powerful lobby of brokerage firms and investment banks. Even the “tick-size” pilot program (which could also be used to trial a trade-at rule) applicable to a small number of thinly traded stocks is yet to be implemented by the SEC. Needless to say, it does not bode well for the US regulator to be an effective watchdog of stock markets.

In terms of developing a robust regulatory policy, the key issue is not just doing some tinkering changes or adding a couple of measures in the existing rules. Rather, a holistic regulatory and supervisory framework is required to address the significant policy challenges posed by the shadowy world of dark pools.

The SEC is following a go-slow approach in introducing a ‘trade-at’ rule and other measures to regulate dark pools.

— Kavaljit Singh

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