White Paper
MiFID II: Preparation Without Delay

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The process of negotiating the mammoth package of laws and technical standards that make up the new Markets in Financial Instruments Directive and Regulation (the MiFID II rules, as we will call them) has been beset by delays. But we now have increasing clarity on the technical rules and the timeline for compliance. Publication of the latest delegated acts by the European Securities and Markets Authority (ESMA) and the response by the European Commission are among the last remaining steps before implementation in January 2018.

Taken together, the measures of MiFID II affect every part of the securities trading value chain: trade execution, investor protection, reporting and settlement. Combined with the European Market Infrastructure Regulation (EMIR), MiFID II will shift the over-the-counter (OTC) derivatives market onto trading venues.

MiFID II will transform the financial markets of Europe. It will do this directly, stipulating new practices by market participants. But its more profound effects will be indirect. By increasing automation and transparency, MiFID II will change the economics of securities trading and, hence, the business models of many market participants. New data management and analysis capabilities will be required, old sources of revenue will decline (or disappear) and new players will enter parts of the business chain.

This report shares the perspectives of Markit and The Boston Consulting Group on the implications of the main elements of MiFID II. We begin by giving an overview of the MiFID II rules, the effect they will have on the market structure and what they will demand of market participants by way of enhanced capabilities and investment in them. We then take a closer look at the implications of MiFID II for investor protection, bond trading, derivative trading, and trade analysis.

**Overview: A New Trading Paradigm**

MiFID II rules extend and reform the original MiFID framework, which was designed for the equities market and implemented in November 2007. Whereas MiFID I was aimed at creating a single European market in equities trading, MiFID II is a response to the financial crisis. It aims to increase investor protection and reduce systemic risk, primarily by increasing market transparency. Among its main measures are requirements for investment firms to publish pre-trade and post-trade data, and to price research provided to clients separately from transaction spreads or fees. Its punitive treatment of over-the-counter (OTC) transactions is intended to drive transactions onto trading venues where volumes and prices are visible to other market participants and supervisory authorities.
To understand the scale of the MiFID II reforms, consider post-trade reporting. Under Articles 26 of MiFIR, record keeping and trade reporting requirements are extended to at least 65 reporting fields (ESMA RTS 22). Only 13 of the original 23 reportable fields will survive the new regime unchanged, with even equities trading requiring an overhaul. Venue and personal identifiers (starting with date of birth and including potentially sensitive personal information), flags to identify short sales and algorithm-specific information will need to be made available in a standardized machine-readable format. MiFID II also requires the use of an International Securities Identification Number (ISIN) for both cash and derivative instruments.

These reporting requirements demand data tracking and data management that exceed the present capabilities of investment firms. Complying with MiFID II will require massive investments in investment firms’ data systems, significantly increasing the automation of the post-trade workflows. And this is just the post-trade transparency rules. As Exhibit 1 shows, MiFID II has implications right along the financial instruments trading value chain, some requiring major changes to market participants’ operating models.

Exhibit 1: Summary of Value Chain Impact of MiFID II

The challenge is especially acute in the Fixed Income, Currencies and Commodities (FICC) market, which could shift from being predominantly OTC to become largely automated and venue-based. At a minimum, most of the trade negotiation process will be captured electronically. For the buy-side, the upside of MiFID II provisions will be a more transparent environment. The downside will be a duty for buy-side firms to manage the available information to make the most effective execution decisions possible – or, at least, decisions that
are quantifiably justified. This burden arises most directly from the requirements for best execution, but also from the new pre- and post-trade transparency data specifications. Firms that cannot effectively store and share this data risk penalties, such as fines imposed by national competent authorities. The obligation for investment firms to report is defined under Articles 25 (record keeping), 26 (reporting obligations) and 27 (instrument reference data) of the regulation.

Article 25 imposes an obligation to maintain transaction data and make it available to regulators on request for a period of five years, with additional provisions for recording even failed voice transactions (unfilled bids or offers). Some exemptions will be allowed – most significantly, the ability to delay meeting the post-trade transparency requirements for large or illiquid trades that might otherwise reduce market liquidity. But the vast majority of buy-side traders will need the ability to comply, and the systems this entails.

An effective requirement to trade on regulated markets (RMs), multi-lateral trading facilities (MTFs) and organized trading facilities (OTFs) will also increase the availability of trade information and accelerate the shift to electronic trading. This new abundance of pre- and post-trade price transparency and a tiered reporting environment is likely to push players towards a more sophisticated use of data. We expect data and analytics providers to integrate with new execution venues to become bridges to compliance (Exhibit 2).

Exhibit 2: Likely Shape of New Market Structure and Venues

The Systematic Internalizer (SI) trade venue designation may add a layer of complexity for buy-side traders. Under Article 20 (4) of the directive an SI cannot exist within the same legal
entity as an MTF or OTF, and an OTF may not connect to an SI in a way which allows the orders and quotes to interact with each other. The designation was created for the remaining bilateral activity, essentially defined as trading using a firm’s own balance sheet.

Multilateral trading facilities (MTFs) were created for the equity markets as specialised venues for matching client orders away from the regulated exchanges. For OTC derivatives it was deemed necessary to create a new venue designation (OTF) that allowed discretionary and voice trading so as to protect the liquidity in these markets. For example, in contracts traded via voice or interdealer brokers, it can be necessary to retract, partially fill or suggest alternative bids or offers to clients to help match them. Discretionary activities are not allowed under the MTF rules, which are based on traditional crossing networks (platforms).

**Investor Protection: What It Means For You**

MiFID II aims to improve investor protection by introducing rules about how research is paid for and through best execution requirements. These measures could cause a major shift in institutional investors’ use of performance metrics. Publicly available information will allow investors to see the costs of research with increased accuracy and, hence, to make better decisions about when it is worthwhile.

**Paying For Research**

Under Article 13 of the delegated act, research must not be used as an inducement: that is, it must not be provided with a view to selling additional services. As a result, all research provided to investment firms can be paid for only based on a preset research budget disclosed to and agreed with clients, or directly through the firm’s own account. The latter option has already been explicitly adopted by three large UK funds since the final rules were published with more expected to follow suit.

Paradoxically, many UK firms had switched to using Commission Sharing Agreements (CSAs) following MiFID I, a hybrid account structure that allowed for research commission to accumulate with investment firms’ executing brokers based on execution flow to then be assigned to the various research providers – essentially splitting payment between execution and research within the agreement with counterparties. By 2009, over 70 percent of UK payments were made through these agreements.\(^1\) CSA budgets also developed to allow switching to execution-only above a certain amount.

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\(^1\) Oxera: The impact of the new regime for use of dealing commission: post-implementation review (April 2009)
There had been widespread concern that CSAs, under the advice previously issued by ESMA, would be proscribed by MiFID II. However, the final rules appear to allow them, provided they comply with the attendant rules governing Research Payment Accounts (RPAs). Under RPAs asset managers must disclose research charges and the amount of budgeted research spend for each client, as well as provide an annual summary of charges in each case. UK managers have expressed additional concerns that the FCA will go beyond the rules described in the delegated acts with respect to such issues as the definition of a “client”, the level at which budgets must be set, how budgets should be allocated to clients and whether money held in a Research Purchase Account is client or broker money. Initial indications are that the FCA will stick to the delegated acts and give asset managers the flexibility to implement the new rules in a manner that is suitable for their firm provided they can show that their rationale is fair and reasonable.

While the FCA appears to be taking a pragmatic approach, it is easy to see why some asset managers have opted out of the system altogether. Managing and tracking research spend through separate RPAs entails a significant disruption to the traditional bundled model, even in the mature equities market where commission management and broker votes are commonplace. However, paying for research with cash raises its own issues. Will research become subject to VAT? How will UK managers acquire US research when the SEC prohibits US brokers from accepting cash if they are not registered as investment advisors? The FCA intends to publish a Consultation Paper in September which should answer these questions.

To make matters even more complicated, these new rules about payment for research will also apply in the fixed income and derivatives markets where research payment is included in the spread and is a fraction of the cost in equities. The impact that direct charging for research will have on spreads post-MiFID II is unclear. In equities, there is evidence that the unbundling of commissions has reduced investment banking research budgets. Equity research budgets are expected to fall 25% by 2020 according to data from BCG, causing some banks to already start scaling back research offerings in European equities. Exhibit 3 shows how this might affect the most valuable parts of equity research functions, according to the buy-side estimates.
Choosing execution and research providers will increasingly be a quantitative exercise based on value metrics made possible by clear cost data. A two-tiered model for research provision is likely to emerge – with some investors receiving semi-automated "low-touch" research, while others buy "high-touch" contact and bespoke research. As the buy-side takes a more careful approach to budgeting for research, suppliers must be aware of how investors’ priorities vary by asset class (Exhibit 4). Regional variations can also be tracked using the same data.
Exhibit 4: Trading Teams Vote Weightings by Asset Class

Towards a New Best Execution Standard

Investment firms are required to provide best execution information under Article 27 of the directive, wording has been updated from "all reasonable steps" under MiFID I to "all sufficient steps" to achieve this. Firms must take into account price, cost, speed, likelihood of execution and size of trade among other considerations. Technical standards from ESMA have also introduced an additional fairness test to the standard, including measuring likelihood of execution. This could be interpreted as requiring investment firms to analyze all the orders sent on their behalf by their brokers, which is a major change to the current workflow. Venues are required to publish data related to best execution, while investment firms are required to publish annual reports ranking their top five brokers and providing information on order flow and execution quality.

Extending best execution requirements to fixed income and OTC derivatives creates particular problems. The investment process of many fixed income managers does not result in firm orders in specific securities. Rather, managers are often indifferent between many bonds and trade according to the available merchandise they are offered. This means that order book-based electronic platforms often do not suit the workflow in the way that the request-for-quote, dealer dependent model does. When it is common for individual bonds not to trade on a given day (or not even trade more than once a month), it is difficult to be
confident that the price achieved on a platform is the best available. We expect the answer to be found in more extensive use of market data – covering multiple sources and venues. This is what happened in the equity markets when transparency and automation caused a fragmentation of flows between a multitude of venues following the implementation of MiFID I. Asset classes with lower electronification rates are more likely to fall short of MiFID II requirements for pre- and post-trade transparency and best execution (Exhibit 5).

**Exhibit 5: Electronification and Data Capture in Fixed Income**

Shortfall in trading data in less electronic asset classes will require fundamental changes to operating models.

Rising electronification rates in corporate bonds, some government bonds and dealer to client (D2C) repo will lead to increased spending on e-distribution, market connectivity and trade capture (Exhibit 6). Similarly, we expect electronification to increase banks’ spending in credit and rates from $20m to closer to the $100m average in FX and Equities.
Fixed Income: A Special Case

The lack of fungibility in bonds, and the resulting proliferation of international securities identification numbers (ISINs), makes any overall liquidity assessment difficult. Yet liquidity is the main factor determining the application of the transparency standard to non-equity products under MiFID II.

ESMA’s liquidity threshold for the European bond market, which the Commission recommends apply from 2018, is an average of 15 daily trades (within 6 months).\(^2\) Only 549 out of a possible 40,000 corporate bonds analyzed qualified as liquid under its own assessment. Using third party data from Trax, only 19 out of 23,558 bonds qualify. This shows that relatively minor differences, such as reference period and universe of bonds, can lead to very different results.

Trading in bonds clusters around new issues, with liquidity trailing off a year after a bond’s issuance. The constant renewal of debt creates a virtuous cycle of market liquidity. However, market liquidity has already been reduced by dealers reducing their inventory in response to higher capital requirements. And MiFID II threatens it further if trading is penalized by "false positive" liquidity determinations under ESMA's thresholds.

\(^2\) 2 May 2016, ESMA opinion on Draft RTS on transparency requirement in respect of bonds
Exhibit 7 shows Markit’s European bond quote data mapped onto the US ratio of executed trades versus quotes in individual ISINs. It plots the frequency of quoting activity for European bonds versus implied trading density and shows that 46% of ISINs are traded one day or less a year. At present, the distribution of quotes versus actual trades is still skewed as most bonds trade less than 50 days a year. As dealers will be held accountable for publishing executable quotes on bonds, we believe the overall number of quotes and trades will fall as dealers avoid quoting on bonds they don’t want to trade.

Even if liquidity thresholds are recalculated periodically, the various liquidity measures fail to take account of the effect changes in market sentiment have on trading behaviour. For example, there is evidence that in times of market stress, bond investors will increasingly seek standardized and liquid alternative instruments such as exchange traded funds (ETFs) to manage their exposure (Exhibit 8). Variation in transparency requirements, cost and, as a consequence, certainty of execution will therefore increasingly become determining factors in execution choices.
Exhibit 8: US Bond Traders have sought Alternative Sources of Liquidity faced with deteriorating Dealer Inventories

US Corporate bond issuance has outpaced dealer inventory

Fixed income ETF trading has increased 37% since 2010

US Corporate Bond Volume versus US Corporate Bond ETF trades

1. US Corporate bond volumes estimated using ADV x 260 trading days per year
   Source: ETF volume data from S&P Global/FactSet, weekly reports, Bloomberg, data as of 15th May 2016
   Source: Federal Reserve, MarketAxess, Thomson Reuters, Bloomberg, S&P AM, BCG Analysis
Securities Financing: The Hybrid Effect

Few provisions in the delegated Directive relate to the treatment of securities financing transactions (SFTs) and their reuse. However, a parallel regulation – the Securities Financing Transactions Regulation (SFTR) – will impose a stringent reporting framework on participants in these markets.

The MiFID directive had specified that securities financing transactions involving the transfer of collateral or reuse would be subject to restrictions around express consent and the use of omnibus accounts. It also imposed diversification requirements to deal with concentration and contagion concerns. A May 4 final report by ESMA (varying the exemption definition under RTS 22 of Article 26 of the regulation) specifically excludes collateral transfer transactions from trade reporting obligations.

Transparency requirements under the SFTR, however, will begin to apply from January 2017 (by which time the RTS should have been submitted), and are likely to trigger a significant change in this market. Trades must be reported to an approved repository on T+1 basis, including derivatives collateral and total return swaps (affecting UCITS and alternative investment managers most, as they will now need to disclose details of short-term financing trades to clients). Reuse and collateral restrictions (again requiring express consent, disclosure and account transfer) take effect from the middle of this year.

Like the frontloading requirement for swaps under EMIR, the relevant SFTR requirements will apply to existing collateral arrangements. Considering the widespread use of repurchase and lending agreements in the fixed income market, standards for disclosure, account transfer and procuring and tracking consent will involve a step-change in market practice.

This is especially so for record keeping, and the publication of reuse and concentration data. In many cases, no system currently exists for identifying transactions that are in scope and firms’ ability to generate LEIs, ISINs and UTIs internally is in question.

Low to negative interest rates have already reduced liquidity in the repo market, leading to the launch of internal matching platforms to help identify sources of short-term demand and shore up volumes. Transparency and reporting may help increase the level of automation possible in this market. The International Capital Markets Association (ICMA) has stated that work on improving derivatives processing may have a positive knock on effect in the repo market. One example given is the Financial products Markup Language (FpML) developed for the electronic derivatives marketplace.
Derivatives Trading: A New Paradigm

Derivatives are the instrument most directly affected by market structure changes in Europe. The punitive treatment of un-cleared OTC trades under EMIR will force market participants to streamline their middle and back office processes as more trading goes into cleared and venue-traded channels defined under MiFID II. To extract returns from the cost of on-boarding with derivatives trade venues, investors will need to direct considerable flows through them.

The European Securities and Markets Authority (ESMA) has already published a regulatory technical standard (RTS) concerning clearing for interest rate and credit derivatives ahead of implementation of the frontloading obligation. 3 Margin requirements for non-cleared derivatives published on March 8 this year require between 200 and 420 billion Euros of additional margin for dealers, according to data published by the European Banking Authority (EBA).4 The threshold for compliance will be phased in over a four-year period, to be reduced annually until September 1, 2020, when it will stand at 8 billion Euros covering 59 institutions based on the EBA data. This will push volume to liquid contracts on regulated venues, or cleared alternatives.

Some capital-heavy contracts, such as single name CDS, have suffered declines in volume as banks retreat from some market-making and clearing activities in OTC markets. The overall decline in single name liquidity has concentrated activity in the most traded names, and the use of alternatives such as futures and discretionary clearing has started to increase. Single name CDS clearing is breaking records (from a low base). ICE Clear Credit hit a new weekly record of just over $6bn notional cleared in April. Markit data that analyses liquidity in five-year European CDS shows a declining top-tier liquidity trend across sovereigns, financials and corporates in the post crisis period (Exhibit 9). As newer leverage and capital rules come into effect, an independent and accurate assessment of the liquidity in this asset class will be necessary.

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3 A uniquely European rule which requires clearing on contracts executed in the period between publication of the rules and their application which applied on May 21
4 https://www.eba.europa.eu/documents/10180/1398349/RTS+on+Risk+Mitigation+Techniques+for+OTC+contracts+%28JC-2016+-+18%29.pdf/fb0b3387-3366-4c56-9e25-74b2a4997e1d
Liquidity thresholds mean that a large swathe of the market will now be covered by the new central clearing and transparency requirements, creating standardised data sources. As in the cash market, the liquidity thresholds will be recalculated annually.

Asset managers will need to understand how their trades will be treated under the transparency requirements according to the size and type of transaction as well as the different types of dealer or venue they are transacting with. For example, a transaction with an investment firm that is not an SI (i.e. does not substantially trade on its own account with clients outside a trading venue) will be exempt from pre-trade requirements; yet a contract traded with an SI that is large in size (LIS) can benefit from a two-day delay in post-trade reporting and be exempt from the pre-trade executable order requirement. The allowance for delegated reporting will also remove some, but not all, of the burden of direct compliance for reporting from smaller players. However, responsibility for accurate and timely reporting will remain with the firm.

As MiFID II implementation efforts accelerate over the coming months, we expect to see a renewed focus on assessing the cost of trading on different venues and the developing cleared/non-cleared market divide. Activity in US SEF-traded derivatives has been dominated by incumbent and interdealer broker trading platforms, while overall adoption of electronic trading has steadily increased in line with cleared volumes (Exhibit 10). The same
SEF venues may simply roll out European-equivalent entities (MTF/OTFs) and maintain their footprint, but there is a real possibility that technology could be an even bigger differentiator given the data challenges in Europe.

Exhibit 10: Evolution of IRS Clearing After Mandatory US Implementation

Trade Analysis: The Next Step

Compliance comes low on the list of reasons firms conduct transaction cost analysis (TCA). The main motivation is performance related, arising from the imperative to generate alpha and manage costs (Exhibit 11).
Fixed income has historically been a low user of TCA because of the inherent opacity of the market and the reliance on manual processes and inputs. As a result, we expect significant growth in fixed income cost analysis and in the use of analytics that assess the full cost of execution options (Exhibit 12).

Exhibit 12: Fixed Income will be Key Focus for Transaction Analysis under MiFID II
Pre-trade cost estimates, and their subsequent verification, will become important parts of the investment process across asset classes. This will go beyond mere instrument selection; trade sizes and venue selection (including clearing and settlement) could also change as a result of more systematic analysis. By integrating predicted trading costs into the portfolio construction and selection process, managers can guard against market structure-based return bleed.

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MiFID II will transform the market, and the adjustment will be costly. But once the data systems and links to third party utilities are established, the buy-side will benefit from the expansion of information available to them. More sophisticated benchmarking and tracking of research provision will make broker vote choices better informed than has previously been possible. And the analysis of liquidity and trading behaviour demanded by best execution rules will surely reap rewards.

The fixed income market is likely to be the most disrupted. Increases in compliance costs and data spend will add to the pressure to update and automate processes. As with research, increased market transparency will sever the link between execution and other services that have been the mainstay of the broker-dealer model. Both sides will take a more quantitative approach to relationship management.

In the derivatives market, a deeper understanding of the full cost of trading could help the market become more efficient, provided liquidity can be maintained. It will then become critical that trade decision-making is informed by holistic analysis that looks across products and asset classes. In many firms, this is uncharted territory. But the drive for front office efficiency and alpha generation will make it increasingly common.
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