Unintended Consequences

QUESTIONS ON THE EVE OF MIFID II IMPLEMENTATION

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Jefferies

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A New 'Big Bang'?

In October 1986, London experienced a financial "Big Bang" – sudden and broad deregulation that prompted significant changes of the city's financial markets. Now, more than 30 years later, many are wondering if the MiFID II directive might have a similar, but opposite, impact.

We are less than 60 days away from the January 3rd, 2018 MIFID II go-live, one of the broadest and farthest reaching European regulations in recent memory, clocking in at nearly a million and a half paragraphs. **Unintended Consequences** explores the current state of play, and details some of the outstanding questions that could have a considerable impact across financial markets - from capital formation to trading and execution.

Many headlines have focused on MiFID II's rules on inducement and research, and those will have a material impact; but there are many additional issues that could affect nearly all corners of the market. Given the considerable follow on impacts of many of these new rules, much confusion remains as to the most efficient and effective way to navigate them. We have already seen a number of organizations publicly reverse course in how they will respond to some of MiFID II's requirements – and many more remain unsure of the best ways to digest them.

During this final run up to January 3rd, it is important for market participants to identify and analyze potential unintended consequences that could impact their businesses in both the short and long term. Many of these potential unintended consequences may disproportionately affect smaller to mid-sized firms – whether companies, investment managers, trading venues or other players. While MiFID II will likely establish a 'new normal,' there will certainly be an adjustment period as market participants work to adapt and optimize their operations in the new landscape.

While this piece focuses on the implications for the equity market, it is critical to note that MiFID II does squarely address and materially impact fixed income as well, prompting an additional set of unintended consequences that should be explored and thought through.

But for the purposes of this publication, what is clear on the equity side - is that much remains *unclear*. When this is the case, it is important for businesses to model multiple scenarios to identify and remediate any potential negative outcomes. It is our hope that **Unintended Consequences** helps to identify issues that may arise, and contribute to the ongoing conversation about how different organizations can effectively adapt to and navigate new regulatory regimes.

MIFID II IN PRACTICE: 10 PREDICTIONS FOR 2018 AND BEYOND

MiFID II's unintended consequences could result in material changes for players across financial services. Below are 10 of our top predictions that dig into where we could see shifts large and small as businesses adapt and things become increasingly clear.



Providers of research will pursue a more fully aligned business model. Certain global mega banks will continue to support a broad research offering; but most everyone else will pick their spots and support research that is best aligned with other offerings including investment banking, equity capital markets, asset and wealth management businesses.



Companies (particularly smaller cap companies) may suffer under less coverage, or consider pursuing a sponsored research route. If there is a thinning of the equity research coverage universe, companies may consider pursuing sponsored research rather than losing all analyst coverage entirely, as companies with no research coverage underperform by 4.2%, on average.¹



Consolidation of firms' research and execution provider lists will finally occur. While predictions of a consolidated supplier base have surfaced for years, and a number of firms have already begun culling tail providers, MiFID II is likely to accelerate this.



Clarity on research and execution pricing may facilitate some cost savings, but that may at least be partially offset by increases in administrative and enhanced reporting costs. Enhanced reporting and additional administrative costs will add a new fixed expense base in a world where fees are declining.



Requirements for introducing 'kill mechanisms' for algorithmic trading could exacerbate periods of acute market stress. Algorithmic trading is designed to reduce or eliminate human interaction – *particularly* during periods of market stress. Reintroducing a human element, particularly for algos that cross jurisdictions, could magnify acute periods.



More investment managers consider bringing corporate access capabilities in house, despite the fact that historically, many of these efforts have failed. This could serve challenging, however, as there likely needs to be an intermediary, given the "one to many" nature of many non deal roadshows (NDRs).



Lack of clarity around Systematic Internalisers (SI) may result in creation of an even larger dark market than exists today. There is a strong likelihood that most of the liquidity within the SI regime will be agreed bilaterally and away from the 10% of SMS quote that firms operating SIs are obligated to make, potentially creating a larger dark market.



A cybersecurity incident will target the centralized cache of personally identifiable information gathered during now routine transaction reporting. One stop shopping for cybercriminals will be too attractive an opportunity to pass up.



The newly created 'glut' of data creates too much noise to initially measure and enhance market integrity. E.U. regulators are preparing to take in a magnitude of data, in real time, from across multiple sources. Having the infrastructure, systems and personnel in place to make sense of it may be initially challenging.



Given the U.S. can watch MiFID II's impact on the market, parts of the regulation may end up washing up on these shores by 2020. U.S. regulators can measure MiFID II's positive and negative effects, cherry picking rules that make sense for protecting investors, while avoiding those that create friction or unnecessary negative outcomes.

¹ Steven DeSanctis, CFA, "JEF's SMID-Cap Study – Analyst Coverage in the MiFID II World, and the Impact on Small Caps," Jefferies U.S. Equity Research, August 7, 2017. Comparing cumulative excess performance of stocks with no analyst coverage vs Russell 2000 since September 2001

Eye of the Storm

MiFID II is meant to enhance and amend the rules that MiFID I first established in 2007, which was more equities focused, and had the objective of removing local market concentration rules that existed in Europe. MiFID I led to a proliferation of new trading venues (including dark pools / Broker Crossing Networks – or BCNs), which resulted in the creation and growth of a European dark market that now represents about 10% of European trading volume. MiFID II, is in part, meant to address the unintended consequences of MiFID I (i.e. - removal of BCNs, dark crossing only at bid/offer and dark volume caps), as well as other market shifts in the last decade. But just as MiFID I resulted in some unintended consequences, so, too is MiFID II likely to create its own set of unintended consequences, as well as uncertainty around implementation.

This uncertainty is particularly acute as we approach January 3rd. As *The Financial Times* noted on the back of the September International TraderForum in Barcelona, "even among [the attendee] experts, uncertainty abounds about the likely effect of the new [MiFID II] regime."² Because of the far-reaching scope of the regulation, MiFID II *could* end up being "one mammoth paperwork exercise" (as one London manager put it), but it's more likely to create long term strategic business impacts once the regulation is fully in place.

It is worth revisiting some of the key requirements of the regulation before digging into other layers of uncertainty.

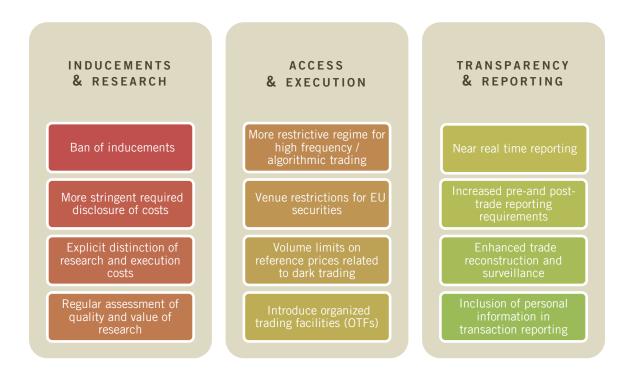


Figure 1. Key Highlights of MiFID II

The sweeping regulation looks across nearly all aspects of capital market activity either directly or indirectly, and transcends E.U. borders – which creates its own set of potential unintended consequences. MiFID II has prompted a thorough review of many firms' infrastructure, compliance efforts, research use, counterparty assessments and performance. While many have argued that regulatory change – particularly change as all encompassing as this – provides not just challenges but opportunities, too much remains unsettled to provide a clear path for forward success.

² Stafford, Philip. "Clock ticks down on EU's MiFID reform." *The Financial Times*, October 9, 2017.

As it is unlikely we will have a clear understanding of the long term implications of these changes by January 3rd, now is a good time to understand the multiple potential scenarios and follow on impacts of MiFID II's marquee new rules.

Inducements and Investment Research

This issue probably has attracted the most headline attention. For the first time – and completely in opposite of the U.S. rule around receipt of research – investment managers must explicitly identify and break out research costs from execution costs.

In doing so they have two ways to fund research costs: i) directly from their own P&L or ii) from a separate Research Payment Account (an "RPA") that is controlled by the investment manager, but funded by end clients/asset owners. On October 26th, the SEC released three no-action letters granting U.S. brokers relief that allows them to receive research payments from money managers in hard dollars. The SEC will monitor MiFID II's implementation and impact over the ensuing 30 months. This provided some clarity regarding the U.S. regulated activities, but the no-action relief is narrowly tailored, and is prompting numerous businesses to review their medium and long term approaches.

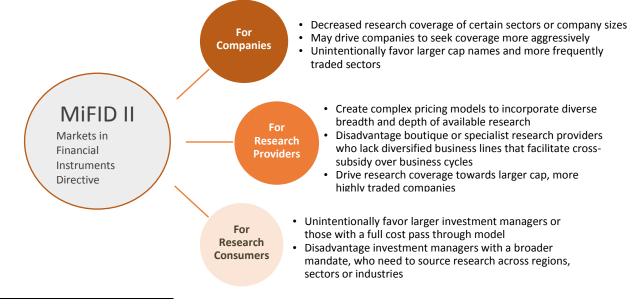
The immediate (and among the most material) impact of MiFID II's rules in this regard are clear:

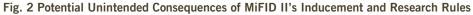
- Providers of research must price and communicate research and execution costs separately
- Consumers of research must determine *what* research is valuable and worthy of consumption on a forward basis, detail a budget for the recurring expense, and fund it out of their P&L or an RPA

The onus for properly recording and reporting receipt of research falls to its consumer (the investment manager). Currently, the Association for Financial Markets in Europe (AFMA) & the Investment Association (IA) are working to construct a standard for Research Charge Collection Agreements (RCCAs) to help limit the potential crippling legal requirements of drafting and reviewing bilateral RCCAs. In all cases, budget disclosure is required at the client level.

As of this publication – it is estimated that fewer than 5% of firms have formalized their approach to paying for research with documentation with research providers. Many managers reported wanting to continue price discovery, and wait for further clarity from U.S. regulators.³ Since there has been no first mover advantage, November and December will be a busy period to solidify the forward terms of these relationships for those in scope.

MiFID II's rules around inducements and research raise multiple follow on questions and potential unintended consequences.





³ Jefferies

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FOR COMPANIES AND RESEARCH PROVIDERS: WHO 'DESERVES' COVERAGE?

Though much of the focus to date has been on the pricing of and relationships between providers and consumers of research, a less examined, but no less important impact of these rules focuses on the companies who serve as the subject of said research. There is a considerable possibility unbundling research from execution costs will magnify any distortions of equity coverage, resulting in potential disadvantaging of smaller or mid cap companies, or those in less "popular" sectors across market cycles.

It's possible that under a direct compensation model, research providers will cover companies that: i) have the broadest market for consumers (a "mass market" model) and/or ii) would have consistent, higher margin consumption (a "specialist" model). Coverage of companies that are more thinly traded, have lower probability of catalyzing events or belong to less popular sectors across different cycles are less likely to be covered; and if they *are* covered, will likely 'cost' more to consume (potentially making purchasing less likely, assuming imperfect price discrimination).

Many expect the ranks of research analysts will thin as a result of MiFID II, which could, in turn, decrease the coverage of companies for whom coverage is already sparser. Other research providers may step into a breach and begin or expand coverage of less covered firms, but there would need to be a market sufficient to consume that research.

Such a decline in coverage, particularly of small or mid cap companies, could have a negative impact on these firms' decisions to come to market or participate in equity capital market transactions. In fact, Carmignac, France's independent asset manager, said it would continue to pass research costs onto clients for exactly this reason. Passing research costs on to clients, a Carmignac spokesman has said, "ensures the maintenance of wide coverage of European mid-cap companies, which are the core of economic growth."⁴

Providers of research with diversified business lines that can cross subsidize their research efforts (particularly over economic cycles) are likely to benefit from the new rules in the short term - possibly at the expense of boutique or more specialist firms. Demand for research varies. Investment managers don't research and invest in the same companies within the same sectors in the same way over the same time periods – advantaging larger, more diversified firms.

Where boutique and specialist firms can differentiate with "independence" or specialization, they may be more limited in their ability to weather certain sectors or company types falling out of favor across particular cycles. They may also have fewer resources to offer the breadth of data and analytics investment managers increasingly value alongside analyst expertise, corporate access and general sector or market color.

Unintended consequences of MiFID II's research and unbundling rules for companies and research providers may include:

- Decreased research coverage of small or medium sized companies or companies in sectors that are less in favor across market cycles, potentially disadvantaging these firms
- Disadvantaging research providers in the short term who lack the resources to withstand aggressive price competition or longer term economic cycles that favor diverse sector offerings
- Thin the tail of research providers or see those at smaller, more niche providers shift to larger or more diverse institutions

Corporate Access is clearly one of the highest value aspects of the Advisory business (a Greenwich Associates study suggest almost 40% of Advisory value), and its close link to Research makes it likely that its value will be considered alongside all Advisory costs and benefits. The future clearing price for Access will likely be set by Hedge Funds and their view of the value of the service, and though it is possible that the buy-side may seek to establish their own

⁴ Mooney, Attracta. "Carmignac Warns MiFID II Will Disadvantage European Asset Managers," The Financial Times, September 27, 2017.

Corporate Access supply, such efforts have been relatively un-successful historically. Demand for bespoke Corporate Access, industry experts and seats at Conferences remains as high as it has ever been, suggesting some pricing power.

Some U.S. broker dealers are also considering registering as an Investment Adviser, which would allow them to accept hard dollar payments for research. The SEC's October no action relief letters were targeted – and temporary – so considering an Investment Adviser designation could offer an additional avenue to effectively service clients. As such, some sell side firms are considering establishing an RIA in which to put Research businesses.

MiFID II has prompted a fundamental rethink by research providers, and it is likely the most profitable and successful franchises over the cycle will be those whose coverage is best aligned with other business lines. Thus, other than at global mega banks, it is likely to prompt a sharpening of the coverage universe to focus on sectors or firms that support broader firm networks.

FOR INVESTMENT MANAGERS AND ASSET OWNERS: ADVANTAGING CERTAIN PRODUCTS OR FIRM SIZES?

Breaking out execution and research costs *in theory* should result in little change for investment managers – especially those who pay for research out of their own account. But new fixed costs always have the potential to create operational and other strategic business headaches. While MiFID II's rules are meant to create more transparency, and benefit end investors or asset owners, they too may have to navigate unintended consequences of the new regime.

It is possible some of the unintended consequences of the new unbundling and research rules for investment managers and asset owners may include:

- Pressure to move from higher fee, research intensive products to lower fee (often passive) products
- Less appetite for "new" research channels like data or analytics where information may be less tested/proven but more useful in earlier stages, given it can be hard to identify a precise ROI for these costs
- More difficulty in moving *among* research providers, depending on how subscription agreements are structured
- Favor larger investment firms due to potential increased fixed operational costs, creating unintentional incentives for emerging managers to join existing firms or platforms
- Any costs savings introduced from more transparency on the research and execution side may be offset by increasing costs to build infrastructure and systems to handle the increased transparency and reporting requirements

While MiFID II is a European regulation, it is entirely possible that U.S. firms could consider adopting some of its principles as a cost cutting effort. Moreover, as asset owners witness MiFID II's impact on their managers' performance (and expense bases) over time, it is possible U.S. asset owners will increasingly request similar information around costs and expenses here.

While headlines have mostly focused on the producers and consumers of research, MiFID II's unbundling, research and inducement rules have the potential to affect numerous other parties, including companies and asset owners. Let's move to access and execution and dig into the transaction related unintended consequences.

Access and Execution

In addition to the considerable attention focused on the rules around unbundling and research, MiFID II introduces a number of new rules around access and execution.

Among other issues, an example of the breadth of what MiFID II addresses:

WHAT	INSTRUMENTS ARE TRADED The Share Trading Obligation may result in EU firms having to trade a dual listed security on the European venue
WHERE	INSTRUMENTS ARE TRADED Introducing volume caps for dark trading and discontinuing Broker Crossing Networks (BCNs)
ноw	INSTRUMENTS ARE TRADED Limiting dark execution on MTFs to the midpoint only, and requiring new circuit breakers

GOOD, BETTER, BEST EXECUTION

The other side of the unbundling equation focuses on execution – investors will now have to evidence they are routing orders to their trading counterparties because of the counterparties' capabilities, ranging from liquidity sourcing to transaction cost, quality of execution, ability to facilitate orders of size, conflict profiles, value of algorithmic products and overall service, among others.

MiFID II enhances a firm's expectation of taking "all reasonable steps" to "all sufficient steps" to ensure they are achieving best execution for clients – and must now verify these efforts on an *ongoing* basis. The enhancement of these rules is in partial response to the marked increase and fragmentation of execution venues, and a push to ensure firms are "aware of the evolving competitive landscape...taking into consideration the emergence of new players and new venues' functionalities or execution services."⁵ Best execution cannot be "set it and forget it" – firms must now *regularly* revisit and measure best execution and broker performance.

In part to facilitate this and improve overall execution transparency, MiFID II also requires brokers to annually report their top five execution venues, and for venues to publish – on a quarterly basis – reports on execution quality.

By enhancing requirements around best execution, and requiring investment managers, brokers and venues to all report more thoroughly and regularly regarding execution, MiFID II requires heightened disclosures from multiple counterparties across the execution landscape.

In addition to heightened requirements for and ongoing monitoring of best execution, MiFID II also directly addresses *how* many of these transactions are executed – with a focus on algorithmic trading. MiFID II defines algorithmic trading as systems having no or limited human intervention, and where, for any order or quote generation process – or any process to optimize execution - an automated system makes decisions at any of the initiating, generating or routing stages, or executing orders or quotes according to pre-determined parameters.

To bring increased transparency to algorithmic trading, MiFID II works to standardize the systems, infrastructure and controls involved therein. MiFID II requires more visibility into pinpointing the origin of an order's submission to venues, and has instituted a requirement that investment firms conduct annual self-assessments to stress test the

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⁵ European Securities and Markets Authority (ESMA), *Questions and Answers on MIFID II and MIFIR Investor Protection and Intermediaries Topics*. 3 October 2017

resilience of their own trading systems. Firms are also required to have in place specific effective systems, procedures and arrangements to ensure resilience and capacity.

MiFID II also introduces a required "kill function" to better control trading in periods of acute stress of algorithmic or high frequency (HFT) trading. This is an area that raises questions around potential unintended consequences in periods of acute stress, particularly if some algos are cross jurisdictional in scope with regions that lack the same requirements.

Finally, with about 10% of European trading currently occurring in dark pools, MiFID II introduces three major changes to dark trading: i) Broker Crossing Networks (BCNs) are eliminated, removing the ability of brokers to multilaterally cross client order flow internally (although some have theorized recently that systematic internalizers may result in more dark trading in Europe)⁶, ii) dark trading on multilateral trading facilities (MTFs) may occur at the midpoint only, and iii) capping lower than LIS dark volume at 4% on an individual venue and 8% as a whole.

These are only some of the most material of the myriad rules MiFID II introduces to market structure, access and execution rules. We chose to focus on these, as they present some of the most clear potential unintended consequences, but certainly others not covered here may prompt other issues. We focus here on some of the issues that may arise particularly in periods of acute market stress, when unintended consequences may be of even greater magnitude.

Some of the notable potential unintended consequences that may arise are as follows:

Figure 3 Potential Unintended Consequences of MiFID II's Access and Execution Rules

EXECUTION

- Considerable operational and technological cost increase for to enhance best execution infrastructure, conflicting with improvements in execution cost for clients
- Administrative burden may challenge smaller firms with high trade volumes from a cost perspective and prompt emerging managers to join larger or platform organizations
- Enhanced reporting and monitoring requirements may see talent pool shifting in trading functions

ACCESS

- Potential for conflict
 between 'best execution' standards and requirements around dual listing shares
- More dark trading may occur
- Operational or liquidity challenges for instruments that run afoul of dark pool volume caps
- Challenges in navigating new liquidity landscape as new operators launch and grow

ALGORITHMIC AND HIGH FREQUENCY TRADING

- Introduction of required 'kill functions' may exacerbate cross-regional issues during periods of market stress if E.U. algos have kill requirements, and other regions do not
- Potential for ongoing confusion as to what, precisely constitutes algorithmic trading; raises questions as to what level of human internvention is required for trading *not* to be considered algorithmic

⁶ Hadfield, Will. "Dark Trading Could Triple in Europe Under New Market Rules," *Bloomberg*, October 4, 2017.

Transparency and Reporting

MiFID II takes the transaction reporting requirements of MiFID I, and expands them: the type of in scope transactions, which parties to a transaction must report, and the contents of what is reported. The additional granularity creates major new operational requirements – and potential administrative burdens and risks for investment managers and reporting parties.

The enhanced transaction and reporting rules are perhaps the most mundane – but most operationally challenging – of MiFID II's new rules. The new reporting requirements aren't limited to investment managers – brokers, trading venues and other market participants now face enhanced disclosure around execution quality to facilitate measurement of best execution. MiFID II introduces new requirements to allow the creation of commercial consolidated tape providers (CTPs).

The number of data fields required in transaction reports (submitted either by firms themselves, through an Approved Reporting Mechanism, or through the venue through which a transaction was undertaken) more than triple, growing from 23 fields under MiFID I to 81 under MiFID II. The European Securities and Markets Authority (ESMA) has issued updated guidelines on transaction reporting, order record keeping and clock synchronization. In each case, the detailed data gathered is meant to build a more comprehensive and transparent record of market activity. But the requirements are considerable and far reaching.

These are some of the most straightforward of MiFID II's rules for individual firms, but they also raise numerous questions. Since MiFID II requires traders to submit personally identifiable information, including passport numbers, many have raised concerns that the regulation essentially creates a data repository for cybercriminals to target for a cache of enormously valuable information.

Among the other unintended consequences from the expanded reporting regime, include:

- Similar to other MiFID II rules requiring enhanced reporting, unintentionally disadvantaging smaller investment managers who may have fewer resources to build the infrastructure and compliance efforts required to sufficiently meet the new requirements
- Create a target for cybercriminals given the required personal information submitted around transactions (including passport numbers)

Inducements &	Access	Transparency
Investment Research	& Execution	& Reporting
How should research be	 How will this impact liquidity of	Do I need to enhance my
assessed across a cycle	the instruments we trade	cybersecurity program
 Is introducing a new fixed recurring cost accretive to our business model How does this advantage or disadvantage different parts of our business, given different verticals leverage and digest research differently 	 Will new controls affect liquidity Should we add or amend our execution counterparty lists 	 because of the growth of data captured and shared externally Do I have the systems to adapt to potential changes or additions for reporting requirements Do we have the ability to develop, maintain and enhance the technical infrastructure to enable the dissemination of quotes to meet pre trade transparency requirements for an SI

Figure 4: Material Questions Arising from Potential Unintended Consequences of MiFID II

Looking Ahead

Given the potential unintended consequences examined in this paper – we pose the following questions to consider over the long term.

- Will MiFID II materially change the liquidity landscape? And how will these potential changes impact firms' ability to leverage the necessary tools to navigate these changes in market structure as well as assessing their counterparties in a thorough and ongoing nature.
- Does MiFID II unintentionally favor the 'supermarket' model of banking at the expense of specialist providers. Some have claimed that boutique research houses may benefit from MIFID, given that many of them have a niche focus or core competency lacking at some of the bulge bracket banks. But this theory ignores that expenses for running any research effort at banks is typically syndicated across multiple business lines, allowing for deeper resourcing across an organization and across business cycles, and for banks to drive down the 'price' of research to maintain market share.
- Does MiFID II unintentionally disadvantage smaller and mid cap companies, or firms in less loved sectors across market cycles? Equity research doesn't solely serve buy side companies exploring which companies or sectors to invest in companies typically *want* to be covered, to reach as broad a market for potential investors as possible. The example often cited, "Why does the world need 20 analysts for XYZ company?" is a massive oversimplification. The world needs as many researchers for any company as the market will bear, because firms participating in capital market transactions want to reach as broad and as well educated a potential investor pool as possible. *The companies themselves* are unlikely to want their coverage universe materially shrunk.
- Will MiFID II unintentionally disadvantage smaller investment managers? The one thing there seems to be broad agreement over is that MiFID will create new fixed costs for infrastructure, reporting, technology and compliance. This increase in administrative costs could prove too onerous for smaller and emerging managers, driving them to join larger organizations or platforms, rather than launching their own firm.

How Jefferies Can Help

The scope of MiFID is enormous, and has considerable immediate and follow on impacts across the capital markets landscape. Given the nuance and ambiguity of some of these rules, it is unlikely that a one size fits all approach would work. The idiosyncratic nature of investment firms, means that principals need to carefully consider the right approach for their organizations.

Jefferies has considerable expertise, resources and solutions to better help clients approach this issue strategically, to maximize the return on your invested time digesting and planning for life after January 3rd, 2018. Please do not hesitate to let us know how we can be of further assistance as you continue to navigate MiFID II, or any other regulatory shift, and we look forward to continuing engagement around these issues.

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