

Fattouh, Bassam (Ed.); Stewart, Peter (Ed.)

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A QUARTERLY JOURNAL FOR DEBATING ENERGY ISSUES AND POLICIES

Energy trading in Europe is on the verge of a fundamental transformation. The implementation of a host of new regulations: the European Market Infrastructure Regulation (EMIR), the Markets in Financial Instruments Directive (MiFID), the Markets in Financial Instruments Regulation (MiFIR), the Market Abuse Regulation (MAR), the Capital Requirements Regulation (CRR), and the Capital Requirements Directive IV (CRD IV) will have profound implications for how international oil companies, trading houses, brokerage firms, investment banks, price-reporting agencies, and futures exchanges do business. While there is a consensus among the contributors to this *Forum* that the new regulations will change the landscape by increasing the complexity of the trading business and the cost of compliance, as well as increasing reporting and capital requirements, there remains much uncertainty as to whether these new regulations will achieve their intended objectives. Of particular concern are the unintended consequences of some of these regulations in terms of: reducing market liquidity, reducing the number of market players, the risks of regulatory arbitrage, and increasing the cost of hedging. Costs associated with these changes will ultimately be passed to end-users.

*Liz Bossley* sets the scene for the *Forum* by explaining the various regulations and directives affecting EU commodity markets and their intended objectives. She highlights the difference between a 'Directive' and a 'Regulation'. The former is a legislative act that sets a target that all EU countries must meet, but it is up to individual countries to decide how to translate this into national law. A Regulation, in contrast, is a binding legislative act and if it contradicts a country's national law that law needs to be changed. Bossley argues that the cost of compliance for banks and large multinational companies to the various directives and regulations being introduced is large and is already posing serious challenges to these institutions. For smaller companies, there is the risk that they would be driven out of the market, which could be 'regarded as collateral damage in the war against market abuse and systemic risk'. But to justify the costs of 'the heavier regulatory hand', these regulations must achieve their objectives, which remains to be seen.

*Marco Kerste and Bert Tieben* argue that the current regulations are based on the premise that the energy sector poses a risk of contagion to the real economy. However, the authors argue that this hypothesis has not been tested in the preparatory stages of introducing

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the new regulations. The authors' research shows that while adverse shocks to the energy sector can have repercussions on other firms within the energy sector itself, there is no evidence that the default of energy companies would pose an externality to the real economy. Their results also show that the contagion risks run from the banking sector to the energy sector, rather than the other way around. The authors conclude that the 'political haste in implementing strict regulation in the aftermath of the financial crisis is understandable, but continuing on this road without sound foundation is not'.

*Peter Caddy* argues that since the financial crisis, European energy trading regulation has moved from the traditional UK-style 'principles-based' approach, to a European 'rules-based' system. Caddy believes that European regulators are inherently suspicious of trading, and that the slew of regulations being proposed fails to distinguish sufficiently between the requirements of financial markets and those of physical commodities markets such as oil. This could damage market liquidity. With respect to the proposed EU benchmarking regulation, Caddy says that this can only benefit the US and Asian markets, where regulators are clearly working to produce a more appropriate regulatory regime than in Europe.

*Orçun Kaya's* article examines in details the recent reform of OTC derivatives, which consists of three main pillars: reporting all derivatives to trade repositories; clearing and trading all standardized OTC derivatives through organized exchanges; and increasing the margin requirements on non-cleared derivatives. Among these, the author argues that central clearing through a central counterpart (CCP) represents a fundamental transformation that would leave market participants no choice but to revise their risk management practices and

business models. So far, however, central clearing of commodity derivatives has been limited. Kaya argues that while standardization is a prerequisite, it is not the only criterion and other factors such as eligibility, liquidity, and efficient pricing are also key for clearing. Also, the author argues that central clearing will increase the cost of derivatives trading, which will be eventually passed on to end-users. Kaya concludes that overall the new regulations will, without doubt, fundamentally transform the derivatives markets, but the impact these regulations will have on pricing, liquidity, and trading of commodity derivatives remains unclear.

*Ben Pott* and *Graham Francis* focus on MiFID II, arguing that its implementation will have a profound impact on the intermediated commodity markets. This will pose many challenges for market participants, particularly for intermediaries, which will have to undergo a significant reorganization of their businesses. The requirements to trade on venues, and the organizational requirements on intermediaries to trade on venues, will transform the trading landscape. A key issue raised by the authors is the host of transparency requirements, both pre- and post-trade, which will depend on a number of factors such as the nature of the instrument and the size of the order – equivalent to the block-size thresholds currently in operation. The authors argue that getting these thresholds wrong would have significant impact on commodities markets as they could damage liquidity and may result in the trading of certain assets being driven outside the EU. The authors argue that venue trading will also be impacted by provisions on position reporting. Pott and Francis conclude that if 'full pre-trade disclosure were to be required, many markets may well be starved for liquidity, and trading would migrate to

dark pools in related assets, or move into third-country markets with lesser transparency requirements'.

*Jonathan Hill* argues that the energy sector is grappling with an unprecedented wave of regulatory initiatives. Post financial crisis reforms extend financial regulation to the physical commodity markets with relatively little tailoring to take account of their underlying nature, posing significant implementation challenges for the oil and gas production industry. The resulting financial and structural impacts are becoming clearer, yet the impact on markets very much remains to be seen. Policymakers must now allow the impact of recent reforms on the oil and gas production industry and its crucial markets to be assessed before proposing any further changes. In particular, there is a need to better understand unintended consequences, cost, complexity, end-user choice, and liquidity.

*Jonathan Farrimond* and *Paul Wightman* argue that the implementation of MiFID II and MiFIR will introduce fundamental changes to the structure of financial commodity markets. The most notable change will be in relation to position limits. While position limits have been applied in the USA for many years, it is a new concept for European commodity markets. The authors argue that the 'move from a regulatory framework which has largely excluded the use of position limits to a place where position limits apply to the vast majority of commodity derivatives is a bold move'. Regulators also face the challenge of setting appropriate limits for potentially thousands of contracts simultaneously. Given the size of the shift, the implementation risk is high and it is therefore important for regulators to 'remain open to amending these initial limits in light of practical experience as the case may require'.



*Ian Taylor* believes that the scope and depth of energy market regulation which has recently been, or is in the process of being, implemented across both the USA and the EU is unprecedented and that the industry is entering 'uncharted territory'. The Vitol CEO says that commodity markets have a proven record of enabling the flow of raw materials, and as a price-discovery mechanism for materials that are the building blocks of economic activity. Taylor identifies MiFID II and the issue of 'systemic risk' as areas requiring particular attention. He argues that policy makers and regulators must ensure that the regulations they promulgate do not have unintended consequences, and in particular he highlights the need for regulators to distinguish between commodity and financial markets. Failing to do so could impair the efficiency of energy markets, potentially resulting in additional costs to the end consumer.

*Peter Stewart* seeks to understand regulators' suspicions of the oil market by examining the evolution of the North Sea Brent benchmark, the most widely used price assessment. He argues that regulators, traders, and price reporters each have different agendas, and use terms such as 'transparency' to mean different things. Stewart notes that the Dated Brent market has evolved since the 1980s from a relatively simple market structure in which cargoes were traded at a fixed price to one in which the fixed price value of the commodity is effectively discovered through the value of three separate derivatives instruments. While this structure suits the needs of traders, and the assessment process

is regarded as fully transparent by the main price-reporting agency involved, it does not inspire the confidence of regulators. Simplifying the pricing structures could be one way of renewing confidence in the market and of reinforcing the price assessments published by reporting agencies.

*Neil Fleming* distinguishes between market manipulation and attempts by market participants to manipulate the price *benchmarks* published by energy price publications. Noting that allegations do not constitute proof, or even evidence, of manipulation, Fleming challenges the 'default assumption' that market manipulation is a systemic problem in commodities markets, or that price reporting agencies are vulnerable to market manipulation or conflicts of interest. He argues that contrary to the assumptions made by many regulators about the inherent superiority of automated price discovery and averaging systems, the price assessments produced by PRAs are in reality protected and enhanced by the expert judgement of pricing specialists. Fleming analyses the anomalies and pitfalls that can result from automated systems, and argues that true market transparency is the product of non-static systems guided by human intelligence, that have the capacity to evolve as markets develop and to react to anomalous events as they occur.

*Andreas Walstad* says that, while the regulatory debate around MiFID II has focused on the impact on large companies with substantial physical and derivatives market exposures, industrial players for whom energy

trading is a sideshow will also be affected. He cites an open letter published in October and signed by energy trade groups across Europe and a number of energy-intensive industries, which points to the disproportionate capital, prudential, and liquidity requirements that could be imposed. Energy and energy-intensive companies were largely exempted from the obligations under MiFID I, but the revised directive casts the net wider and could seriously affect both the market and the industrial groups concerned. Walstad says the industry's calls for more flexibility should be taken seriously. A longer phase-in period of MiFID II for non-financial firms would be one way to give industrial players breathing space to adapt to the new requirements.

*Andrew Tuson* tracks the regulatory changes that governments and regulators have sought to introduce to prevent the manipulation of financial markets and to protect consumers since the financial crisis. He argues that whilst the regulatory changes proposed may work well for financial markets, their application to energy markets in fact poses risks to the orderly operation of those markets. Tuson says that the proposed European benchmark regulation does not sufficiently address the difference between rate markets and physical markets, and could result in the energy markets being damaged by creating distorted and unreliable prices. He argues that the Market Abuse Regulation due to be implemented in 2016 may provide a more effective tool for managing the risk of manipulation.





## We are better informed, but are we any the wiser?

Liz Bossley

Long before the banking crisis and the Libor scandal kicked off in 2008, regulators were hard at work trying to protect markets and investors from deliberate abuse and from structural flaws that could bring the whole system down in a cascade of cross defaults.

After 2008, the verdict on these efforts was 'must try harder' because the regulatory grip that had been tightening slowly since the European Investment Service Directive of 1993 had done nothing to stop abuse or to give an actionable warning of the banking bail out that was about to be needed.

Since then, the G20 leaders' summits have been attempting to restore global growth, strengthen the international financial system, and reform international financial institutions.

A significant step was taken in 2009 when the G20 leaders agreed that all standardized OTC derivative contracts should be cleared through a central counterparty (CCP) and that over-the-counter (OTC) derivative contracts should be reported to trade repositories (TRs) by the end of 2012. The objective was to increase transparency in the market, in the hope of being able to head off any future problems before they spiralled out of control.

This article focuses on Europe's contribution to the global agenda, which has taken the form of a series of Directives and Regulations.

### Directives and Regulations

The first point to get clear is the difference between European Directives and European Regulations.

A '**Directive**' is a legislative act that sets a target that all EU countries must

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**'A DIRECTIVE IS A LEGISLATIVE ACT THAT SETS A TARGET THAT ALL EU COUNTRIES MUST MEET.'**  
 .....

meet. However, under the subsidiarity principle, it is up to the individual countries to decide how they transpose the directive into national law. The directives that will be discussed in this article are:

- The Market Abuse Directive (MAD I) (2003/06/EC) had been implemented in 2005 by the European Securities and Markets Authority (ESMA), imposing administrative sanctions or compensation mechanisms under civil law on market abusers.
- The Criminal Sanctions for Market Abuse Directive (MAD II) (2014/57/EU) imposes additional criminal sanctions against abusers.
- The Market in Financial Instruments Directive (MiFID I) (2004/39/EC), which took effect in 2007, and its updated version, MiFID II (2014/65/EU) aims to increase transparency and limit exposure in the OTC market.

A '**Regulation**' is a binding legislative act. It must be applied in its entirety across all EU countries. If there is a national law that conflicts with the regulation, then that national law must be changed. The regulations that will be discussed in this article are:

- The Market Abuse Regulation labelled (596/2014) (MAR) will replace MAD I in mid-2016 within the scope

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**'A REGULATION IS A BINDING LEGISLATIVE ACT. IT MUST BE APPLIED IN ITS ENTIRETY ACROSS ALL EU COUNTRIES.'**  
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of MiFID I. The scope will be widened to encompass MiFID II in January 2017. MiFID II and MAR have to be consistent in what they say and from when they apply, and therefore should be considered together.

- The Markets in Financial Instruments Regulation (MiFIR) updated and strengthened MAD I and led to the drafting of MAD II.
- Known as the European Market Infrastructure Regulation (EMIR), Regulation (EU) No 648/2012 on OTC derivatives, central counterparties, and trade repositories is intended to fulfil Europe's commitment to the G20 to increase transparency, to supervise the OTC derivatives market, and to level the playing field across all European member states (MSs).
- Regulation (EU) No 1227/2011 of the European Parliament and of the Council of 25 October 2011 on wholesale energy market integrity and transparency (Regulation on Energy Market Integrity and Transparency or REMIT) adapts the other market regulations to the cross-border characteristics of the gas and power markets.

A Directive is unlikely to result in a speedy response to a crisis because it requires separate consideration and tailored drafting by each of the 28 European MSs individually. A Regulation can execute a call to action *comparatively* more speedily because it defines the consistent action to be taken across all MSs by a specified date.

### Market abuse

MAD II/ MAR address market integrity and investor protection.



Market abuse, in European parlance, consists first of insider dealing (when a person trades in financial instruments while having inside information in relation to those instruments, not known to other market participants and likely to move the price). Secondly, market manipulation is also abusive, for instance, the spreading of false information, or entering into off-setting non-arm's length trades at off-market prices while only informing price-reporting agencies of one of the deals, while conducting trades in related instruments

MAD I gave the regulator the right to investigate suspicious price moves, but it did not give sufficient legal certainty for the taking of administrative measures or for the imposition of 'effective, proportionate and dissuasive' sanctions in all European countries, although the UK Financial Conduct Authority (FCA) has taken a large number of successful actions against offenders.

Significantly for energy commodities, the MAR enters the difficult territory of regulating the physical commodity market. According to the FCA *'Commodity markets are unique in how their market activities straddle the regulatory boundary so that behaviour in the physical market can affect the financial markets and vice versa. This physical market activity is an increasingly key influence on the real economy.'*

This introduces the prospect of a regulator taking responsibility for regulation of the troubled oil market; for example, the Dated Brent price assessment, the 30-Day BFOE (Brent, Forties, Oseberg, Ekofisk) market, the Dubai crude oil market, and Singapore gasoline. Any regulator that takes on responsibility for the regulation of the physical oil market cannot draw a line at Europe, because oil is an intricately intertwined and very international market.

Not only do MADII/MAR extend regulatory oversight to new trading venues and financial instruments, including OTC commodity derivatives, they also give regulators more investigative powers (such as access to premises or phone records), and sanctioning powers (for example, EUR 5 million for an individual and EUR 15 million or 15 per cent of annual turnover for a firm).

In addition to clarifying and strengthening these administrative sanctions, custodial sentences of up to four years may be imposed on individuals found guilty of insider dealing or market manipulation, and up to two years for disclosing inside information unlawfully. It is intended that MAR will give whistle blowers more protection under law.

The UK has opted out of MAD II and is instead introducing its own separate criminal sanctions.

## MiFID/MiFIR

MiFID/MiFIR address market efficiency, market safety, and transparency. The main objective of MiFID I was to create a common internal European market and to promote competition amongst trading platforms.

MiFID I took effect in 2007 – arguably playing a role in triggering the financial crisis by encouraging trade in OTC markets. This is because MiFID I did not adopt early proposals to oblige OTC trades to migrate to regulated markets (RMs). Instead, MiFID I recognized the concept of multilateral trading facilities (MTFs) that are not exchanges, but which were allowed to operate alongside RMs in an OTC market.

Operators of MTFs are able to offer more exotic and tailored products than those that are offered on RMs; however, MTF transactions are subject to less onerous reporting provisions

so positions and exposures are consequently more difficult to track.

MiFID II / MiFIR recognizes a new actor – the Organized Trading Facility (OTF). Buyers and sellers of bonds, structured finance products, emission allowances, and derivatives can interact on an OTF in a way that results in contracts, for example broker crossing systems or inter-dealer broker systems. Running an OTF is an investment service and the operator must be licensed as an Investment Firm in the same way as an RM or MTF.

Unlike operators of RMs and MTFs, OTF operators have discretion in placing bids and offers and in matching orders, in accordance with clients' instructions. For example, a client of an OTF may specify that it does not want its orders matched with a particular counterparty with whom, for example, it may already have reached an internal dealing limit.

RM, MTF, and OTF operators cannot trade using their own proprietary capital, except in the case of illiquid sovereign debt instruments in the case of OTFs.

Otherwise OTFs are now held to broadly the same standards as RMs and MTFs in terms of transparent and fair, non-discriminatory, and orderly trading.

**'MiFID II AND MiFIR ARE TIGHTENING UP MARKET SURVEILLANCE ACROSS ALL PLATFORMS TO IDENTIFY MARKET ABUSE.'**

OTFs should not be confused with Systematic Internalizers (SIs). For example, the head office trading function of a major oil company or utility may act as a central dealer for its asset teams or its overseas affiliates. In doing so the SI may deal on its own account or match external orders more efficiently within its own greater

corporate book. SIs do not have to be licensed to carry out this activity.

MiFID II and MiFIR are tightening up market surveillance across all platforms to identify market abuse. Trading venues of all kinds are being held to high technical standards to ensure that they do not collapse when subjected to high volumes or volatile prices.

But where the new rules are being felt first, and by most firms, is in the area of transaction reporting and clearing. This requires more detailed regulations, such as EMIR and REMIT, and needs lengthy and detailed regulatory technical standards (RTSs).

## EMIR

EMIR applies to futures, forwards, swaps, and options bipartite trades in the OTC market, including commodities. If a company is incorporated outside Europe (a 'third country entity') EMIR can still apply if the foreign company is dealing with a European company. The latter will have to oblige the non-European counterparty to comply with EMIR before they can trade. Similarly, if the deal involves a European instrument, or if the activity concerned can have an impact on a European market, it is within the scope of EMIR.

EMIR requires three things of derivative users, including users of commodity derivatives:

- Reporting of risk;
- Clearing of risk; and,
- Mitigation of risk.

Each deal is reported to a trade repository (TR), which aggregates it and passes it on to a national competent authority (NCA), through ESMA which analyses it for signs of international systemic risk.

The extent to which EMIR applies depends on whether the company

concerned is a Financial Counterparty (FC), a non-Financial counterparty above a dealing threshold (NFC+), or a non-Financial counterparty below a dealing threshold (NFC-). Whether the company is NFC+ or NFC- depends on the size of its notional position over a rolling 30-day average period. The threshold in the case of commodities is greater or less than the figure of EUR 3 billion.

FCs and NFC+ companies have to do more than simply report deals. They have to give up the trade to a Central Counterparty (CCP) for clearing.

The risk mitigation requirements of EMIR require parties to deal responsibly by:

- Confirming trades promptly;
- Marking trades to market on a daily basis;
- Having a dispute resolution procedure in place;
- Performing portfolio reconciliation at regular intervals;
- Performing portfolio compression, i.e. netting off long and short positions held with the same counterparty;
- Exchanging collateral to secure trades which cannot be cleared; and,
- Applying higher capital adequacy obligations on FCs.

The good news is that transactions carried out for hedging purposes are exempt from the EMIR clearing threshold calculation, but the bad news is that if one of a consolidated group of entities exceeds the threshold then they all have to clear eligible trades, whether used for hedging or not. Moreover, as any trader who has ever dealt with auditors will confirm, proving when a trade is a hedge rather than a speculative punt is no easy matter.

## REMIT

REMIT is similarly designed to increase transparency and root out market

abuse, but it is specifically aimed at the wholesale energy markets (WEMs), including their derivative markets.

The interconnectivity of gas pipes and electric wires across Europe makes it difficult to assign the responsibility to police and deal with market abuse to a particular national regulatory authority (NRA). So an Agency for the Cooperation of Energy Regulators (ACER), a new governing body, has been created to implement and monitor REMIT reporting across Europe and to assess which NRA needs to be involved in any particular incident. It is the NRAs that are responsible for setting and enforcing national penalties for market abuse.

The target entity under REMIT is the 'market participant', which includes 'any person, including transmission system operators, who enters into transactions, including the placing of orders to trade, in one or more wholesale energy markets.'

End-users of wholesale energy may have a get-out clause if they only enter into contracts for the supply and distribution of electricity or natural gas for their own use and have a consumption capacity of less than 600 GWh per year.

However one important qualification is made for contracts traded at organized marketplaces: these all have to be reported to ACER.

## The bottom line

The cost of compliance with these new Directives and Regulations will be enormous and it is already causing headaches for the banks,

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large multinational energy companies, and trading houses operating in the energy markets. Targeted entities are particularly frustrated by the need to report the same information to different regulators in different formats.

Smaller companies who really only want to use the markets for hedging purposes are likely to be driven away by the reporting requirements alone. That may be no bad thing, judging by the number of such companies who end up in court complaining that they had only authorized hedging and did not appreciate that their traders had

gone to the dark side and started making speculative punts.

Small-scale hedgers may be regarded as collateral damage in the war against market abuse and systemic risk, but anything that reduces liquidity increases costs by widening bid-offer spreads.

The heavier regulatory hand we are now seeing must therefore achieve its objectives to have any chance of justifying the cost.

ESMA currently has a perfect opportunity to demonstrate the value of the regulatory effort.

As large trading companies such as Glencore struggle publicly with the consequences of low commodity prices, it would be reassuring to have a regulator confirm or deny fears that we are looking over another precipice of systemic risk, this time involving the big private trading houses. It would go a long way to silencing the critics if ESMA were able to either confirm or scotch persistent rumours that have been circulating for months that we are about to see another Lehman Brothers in the commodities market. Don't hold your breath!



## Financial regulation in the energy sector: jumping the gun

Marco Kerste and Bert Tieben

The inclusion of energy OTC derivative trading in EMIR (European Market Infrastructure Regulation) strongly builds on the assumption that the sector poses risk of contagion towards the real economy. This hypothesis of systemic risk was not well tested as part of the regulatory preparation. We find that empirical evidence does not support the hypothesis, questioning the necessity of financial regulation in the energy sector.

### ..... 'THIS HYPOTHESIS OF SYSTEMIC RISK WAS NOT WELL TESTED AS PART OF THE REGULATORY PREPARATION.' .....

When assessing the net benefits of regulation, it would be easy to take the intended contribution as a given starting point in terms of positive impact. Alas, in our experience this constitutes a typical example of 'jumping the gun', as the intended contribution of regulation is not always rigorously tested upfront. Where we expect that other contributors in this issue will focus on the impact of EMIR on energy commodity trading *after*

the implementation, we focus on the question of whether it was necessary to include energy OTC derivative trading as part of the scope of EMIR in the first place.

### OTC trading and perception of systemic risk – role of regulation

Let us first look at the intentions of EMIR: it aims to curtail systemic risk from over-the-counter (OTC) trading by introducing a set of legally binding rules to improve the transparency of OTC trading and diminish counterparty risk. This latter task is achieved by making central clearing an obligation. This obligation also extends to non-financial counterparties (NFCs), depending on the type of OTC contracts and the notional value of the contracts.

With EMIR, the scope of financial regulation is thus expanded towards non-financial sectors, assuming systemic risk can be channelled from non-financial sectors to the financial sector through the use of derivatives. Although the credit crisis indeed points at serious risks in OTC derivatives

trading, the actual extent to which non-financial companies contribute to systemic risk has hardly been the subject of research. Policy discussions on EMIR have generally focused on regulation design and the necessity of practical rules. This does not mean that it is illogical to assume that non-financial sectors contribute to systemic risk via the use of OTC derivatives.

In their 2011 paper 'Regulating Systemic Risk: Towards an Analytical Framework' (*Notre Dame Law Review*, 86:4, page 1351) Anabtawi and Schwarcz define systemic risk as 'the risk that a localized adverse shock, such as the collapse of a firm or market, will have repercussions that negatively impact the broader economy'. The function of banks as financial intermediaries – being a condition *sine qua non* for funding the consumption and investments of many economic participants – implies a close relationship with the real economy. In other words: a disruption of this function has a direct impact on activities in the real economy. This puts financial institutions at the centre of the



systemic risk discussion. But that is not the whole picture.

In identifying systemically important markets, institutions such as the International Monetary Fund (IMF), the Financial Stability Board (FSB), and the Bank for International Settlements (BIS) point primarily to size, substitutability, and interconnectedness. And it is because of meeting at least the first and last of these three criteria, in combination with the counterparty risk involved, that OTC derivative markets are often considered to be an important component of systemic risk. This explains why regulations, such as EMIR, relating to financial markets and specifically focusing on the role of derivatives in financial trading, are introduced. And, as a direct consequence, non-financial sectors are also brought under the potential scope of financial regulation, given that commodity products such as energy are the subject of OTC contracts.

#### **EMIR's intended role in targeting systemic risk**

EMIR explicitly focuses the clearing obligation on the curtailment of systemic risk. However, there is very little factual evidence that the clearing obligation will actually achieve this objective, or that it will do this in a cost-efficient manner. The draft regulation for EMIR included an impact assessment of different options to curtail systemic risk. The Impact Assessment by the European Commission in 2010 initially referred to counterparty credit risk and operational risk as such, but the regulation clearly isolates the reduction of systemic risk as the prime target. However, what exactly constitutes systemic risk is left open. It is therefore

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 CLEARING OBLIGATION ON THE  
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striking that the impact assessment is purely policy driven: the clearing obligation is preferred because, by definition, it reduces counterparty risk for OTC contracts on an individual level. But this does not mean that systemic risk at a market level is also tackled. At a certain point in the draft-making process the phrase 'systemic risk' was simply substituted for 'counterparty credit risk', which underlines that there was hardly any analysis of the nature of the problem that EMIR aims to solve. Nor was this achieved by the impact assessment executed as part of the regulatory process following the official publication of EMIR. This cost-benefit analysis still ignored the nature of systemic risk as a phenomenon pertaining to the level of derivative markets as a whole, merely isolating costs and benefits that can be attributed to specific details of the regulation.

As such, there is no overall assessment of the costs and benefits of EMIR, in terms of the reduction of systemic risk that it generates as an economic benefit, balanced against its economic costs. More generally, the European Securities and Markets Authority (ESMA) continues to use systemic risk as the main target for which EMIR is considered to provide the solution, without sound evidence of the problem as such, nor of its magnitude and the best ways to tackle it.

#### **Do non-financial sectors contribute to systemic risk?**

As the proof of the pudding is in the eating, the question that thus remains is whether non-financial sectors like the energy sector do indeed contribute to systemic risk (as the banking sector does) and if so to what extent? To answer this question, in our 2015 article 'Systemic risk in the energy sector – Is there need for financial regulation?', we investigated how

systemic risk *within* the energy sector compares to systemic risk *within* the financial sector, as well as the degree of contagion risk *from* the energy sector *towards* the financial sector. This latter form of contagion risk formed the primary reason for including energy sector derivative trading in the scope of EMIR.

To empirically test the degree of contagion risk our research uses a proxy for systemic risk; this is based on the chance of companies defaulting given that at least one other company defaults, in other words, the expected fraction of 'additional failing firms'. It also introduces an indicator for the causality of contagion risk, because the direction of the contagion is an essential element underlying regulation.

Interestingly, linkages between companies in distress (in other words, the chance of failures spreading *within* a sector) are highest in the energy sector. That is, higher than in the construction, food, insurance, and even the banking sector. The extensive use of derivatives might play an important role in this regard: energy companies are generally each other's counterparty in derivative contracts. Another explanation is the high degree of vertical integration in the sector, with firms controlling both production and networks for transmission and distribution. This integration provides a channel for financial contagion within the energy sector. Finally, there is a strong correlation between the economic performances of energy firms, as energy prices are closely tied to the international price of crude oil. Changes in this price constitute a fundamental indicator for the economic wellbeing of the energy sector as a whole.

#### **Risk of direct impact on the real economy?**

In testing the contribution to systemic risk, the question is first whether an outcome in which risks are relatively



intertwined in the energy sector – via the use of derivatives or not – causes a *direct* impact on the real economy. The potential *direct* impact of OTC commodity derivative trading by the energy sector on the real economy is generally seen to operate via the price mechanism – and more specifically through the risk of price shocks due to speculation on energy derivative markets. Based on earlier research in our 2011 study *Curtailing Commodity Derivative Markets*, we conclude that high systemic risk within the energy sector is mainly a problem for the energy sector itself. The high expected fraction of additional failing firms means that a localized adverse shock in the energy sector will have repercussions for more energy companies, and potentially for the energy sector as a whole. However, there is no empirical evidence that the defaults of energy companies will pose a direct negative externality to the real economy.

#### Contagion risk to financial sector – indirect impact

More important for the assumption that the energy sector would pose

systemic risk is the second question: whether there is contagion risk from the energy sector towards the financial sector. This would imply an *indirect* impact on the real economy. We find that, on average, contagion risk runs from the banking sector towards the energy sector and not the other way around. Moreover, compared to the food and construction sectors, the energy sector does not stand out in terms of contagion risk towards the banking sector. Because the use of derivatives in the food and construction sectors is much lower than in the energy sector, the results indicate that the mere use of commodity derivatives by firms in the energy sector does not seem to be an essential element affecting the magnitude of potential contagion.

#### Conclusion

The hypothesis underlying regulation of the energy sector – that the high use of commodity derivatives implies relatively high contagion risk from the energy sector towards the banking sector – is not supported by the empirical data. This provides

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**‘... THE EXACT CONNECTION BETWEEN SYSTEMIC RISK AND OTC TRADING BY NON-FINANCIAL SECTORS REMAINS UNKNOWN.’**  
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a first check of the need for financial regulation in the energy sector, and it turns out to be negative. However, further research into the nature of systemic risk in the energy sector is needed. We conclude that currently, from an economic point of view, both the need for, and the design of, EMIR lack conclusive analysis with regard to the inclusion of at least the energy sector. More generally, the exact connection between systemic risk and OTC trading by non-financial sectors remains unknown. The political haste in implementing strict regulation in the aftermath of the severe financial crisis is understandable, but continuing on this road without sound foundations is not.

*This article is partly based on: M. Kerste, M. Gerritsen, J. Weda, and B. Tieben, ‘Systemic risk in the energy sector – Is there need for financial regulation?’, Energy Policy, 78 (2015), 22–30.*



## Cause and effect: the impact of European regulation

Peter Caddy

The European oil market is experiencing a veritable tsunami of new legislation and regulation which has not yet reached its full course and which will have profound consequences on the way oil is traded.

The impetus for the new European regulation comes out of two events. The first was the 2008 crude price rise to USD 147/barrel which destabilized the plans and aspirations of many European political leaders and led to accusations that the oil market

was either rigged or in the hands of odious speculators. The second was the 2012 Libor scandal which, although having nothing to do with oil, confirmed, to those inclined to believe that markets are inherently immoral, that action was needed to prevent fraud and manipulation. The distinction between financial markets and trade in commodities was then deliberately muddled by some European governments to surreptitiously extend financial market regulation into the trading of commodities.

#### Risks of moving to ‘rules-based approach’ for EU regulation

As a consequence, oil trading is facing a new regulatory regime. Instead of the traditional ‘principles-based approach’ of UK regulators, with an emphasis on market integrity, the European Union (EU) is instituting a ‘rules-based

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**‘A RULES-BASED APPROACH PLACES THE EMPHASIS ON THE IDENTIFICATION AND PUNISHMENT OF WRONG DOERS ...’**  
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approach', more in tune with the customs of continental Europe than the UK. A rules-based approach places the emphasis on the identification and punishment of wrong doers, on the assumption that this will produce a 'better' market.

There is an irony in that the USA, which has traditionally taken a rules-based approach to markets, is now trying to establish a principles-based approach to some regulation. The Commodity Futures Trading Commission (CFTC), which is responsible for the secondary legislation that emanates from Dodd–Frank, is continuing to write and enforce more Dodd–Frank rules but is also recognizing that rules can be over complicated and can lead to companies fleeing the market because legal risks and compliance costs act as major deterrents to participation. The rigid application of inappropriate regulation aimed at wrong doers can damage and even destroy market liquidity, not because there are wrong doers, but because the costs of compliance are borne by innocent parties who face risks should they accidentally fail to comply with what are often inconsistent and contrary legal requirements. In those circumstances, advise their legal counsel, it is better to avoid the danger by fleeing.

The European oil market regulatory environment is in the process of switching from the old Financial Services Authority (FSA) 'integrity of the market' approach to the new Financial Conduct Authority (FCA) approach designed to 'identify fraud and market manipulation' backed by new European legislation. But the costs imposed on the industry through capital requirements, position limits, collateral obligations, and the provision of data that the regulators require to monitor and supervise the market will damage liquidity in certain forms of trading. The industry will seek lower-cost risk management vehicles,

cheaper locations, and new forms of contract to avoid the costs and risks of the new regulation. An irony is that the EU has exposed its consumers to the unintended consequences of oil market regulation, despite not having prosecuted or secured a conviction for fraud or manipulation in the oil markets, even though there was intense political pressure to do so, and notwithstanding the 'dawn raids' on leading oil market participants.

#### **EMIR, REMIT, MAR, MiFID, CRR/CRD IV, ...**

Trying to follow the course of European regulation risks death by acronym. There is EMIR (European Market Infrastructure Regulation), REMIT (Regulation on Energy Market Integrity and Transparency), MAR (Market Abuse Regulation), MiFID (Markets in Financial Instruments Directive), MiFID II, the Capital Requirements Regulation and Directive (CRR/CRD IV) and the, as yet, unabbreviated proposed European benchmark regulation. This is in addition to the pre-existing legislation and regulation surrounding market manipulation, manipulating a benchmark, and exchange regulation.

The most impactful legislation will probably be MiFID II, and its consequences for the impact of CRR/CRD IV, followed by EMIR. REMIT, which affects gas and power markets, was essentially in place anyway through national requirements, and market manipulation was always illegal.

It is unclear what impact the EU benchmarking regulation will have, but it can only be to the benefit of the US and Asian markets, where regulators are clearly working to

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**'DERIVATIVE TRADING IN OIL EXISTS FOR A PURPOSE – AND THAT PURPOSE IS NOT SPECULATION.'**  
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produce a more appropriate regime than in Europe.

EMIR was a response to the G20 leaders' call in Pittsburgh in 2009 that all standardized derivative contracts should be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central counterparties. However, policy makers failed to grasp the fact that there is no obligation to trade standardized derivative contracts by the oil industry. And here lies the fundamental misunderstanding by policy makers in their attempts to regulate the market. Derivative trading in oil exists for a purpose – and that purpose is not speculation. Speculators may be active in the market, but derivatives exist to manage price risk. Derivatives are, or have been, a cost-effective means of managing price risk. But they are not the only option available to the industry to manage risk. And if they become too costly, or too legally risky, then the industry will manage its price risk through different means, much as it did in the USA through most of the last century.

#### **Distinguishing physical commodities from financial markets**

The oil industry, and the oil market, is much misunderstood in Europe, often deliberately so. The 2008 price rise, for example, was not simply speculators running out of control, but was a result of the industry's inability to produce sufficient diesel to meet demand. Similarly, the recent fall in crude prices to around USD 40/barrel is a consequence of the industry's inability to stop producing diesel when there is more than sufficient to meet demand. The misunderstanding by policy makers is caused by their inability to grasp the relationship between crude oil and products, and between the trade in crude oil and a refiner's call to meet product demand. Policy makers



typically only 'see' the futures price and therefore, almost by definition, everything else must be murky and incomprehensible, even though it is in full view to the industry and anyone who chooses to subscribe to a price-reporting service's market reports. As a consequence, policy makers view the world through a distorted lens and their responses become misplaced as a result.

Similarly, policy makers in Europe fail to understand the distinction between financial markets and the trade in physical commodities – confusing financial swaps with physical trade, and confusing physical price identification with the generation of a pure financial benchmark. This is creating major problems with the implementation of MiFID II legislation: from establishing position limits to position reporting; from defining ancillary activity to imposing restrictions and costs on such activity; and in defining what is, and what is not, a derivative. There will probably be similar problems of implementation when the EU benchmarking proposals become law.

### Price risk management

Managing price risk is almost as important as managing volume risk for oil companies. It is 'almost as important' because it is easier than dealing with volume risk, not least because there are many ways of dealing with it. How and where companies manage their price risk is varied. It is not all through the European derivatives market, it is just that the derivatives markets have proven to be the most efficient and cost effective way of managing such risk. But if this ceases to be the case, then the industry will revert to other ways of managing price risk. This will mean that the outcome of the new European regulatory environment will have

been the undermining and potential destruction of the transparency and efficiency of derivatives in favour of less transparent and less efficient options, or the shifting of risk management to a different jurisdiction.

Companies that buy and sell along the supply chain in oil are not doing so in order to speculate on upward or downward price movements. They are producing oil at the top of the supply chain and then moving it, sometimes indirectly by trading it on, down the supply chain to the consumer. In doing so they are remunerated by taking the oil from where it is in surplus, such as at the well head, to where it is required, at the pump. Doing this carries inherent price risk.

### **' A MISUNDERSTANDING OF THE PURPOSE OF THE DERIVATIVE MARKETS IN OIL LIES AT THE ROOT OF THE DIFFICULTIES IN THE EUROPEAN REGULATORY ENVIRONMENT.'**

This risk can be mitigated through a variety of means, only one of which is hedging the commodity through derivative contracts. A misunderstanding of the purpose of the derivative markets in oil lies at the root of the difficulties in the European regulatory environment. Policy makers think that derivatives determine the price of oil or 'are' the oil market. But crude oil is rarely sold through the futures markets. Even when physical delivery is possible, as with the Nymex crude oil futures contract, most crudes that are linked to this price will trade at a price differential to account for quality, location, timing, and contract terms. Try calling a Canadian crude producer in Alberta and asking if he is receiving the USD 50/barrel price of first month Nymex futures for his barrel of heavy synthetic crude.

Oil companies are involved in the physical supply chain. For companies in the supply chain, derivatives trading

is, if they participate in it at all, ancillary to their primary activity, even though this will likely not legally be the case according to the new MiFID rules going through Europe. And here lies the rub. Policy makers are defining activity in a legal manner, in the expectation that they can then instruct it to occur in a prescribed manner. But they fail to understand that companies can avoid such a prescribed manner by changing their activity.

### Consequences of EMIR

EMIR has inadvertently – indeed, counter-intuitively for policy makers – already led to gas and power trade moving from MTFs (multilateral trading facilities) to non-MTFs, or into bilateral OTC (over-the-counter) contracts. The result may be that some small exchanges go out of business. Probably, business will become focused through one dominant exchange and there will be a concentration of the liquidity through the companies that have been prepared to absorb the costs of the regulation. MiFID II is likely to intensify this shift and extend it into oil. The capital requirement costs, the management and compliance costs, and the regulatory restrictions on position limits will reduce liquidity in standardized derivatives. There will probably be a movement of oil derivatives trade to exchanges out of the EU where banks, in particular, will be able to trade without the same restrictions imposed in Europe, and where trading costs will be lower. For oil companies, the focus will be on price risk management through non-standardized means such as embedded options in physical contracts, which will provide companies with the flexibility to shift trade flows, either through location or timing, to a more optimal market. Large oil companies are already writing contracts in this manner and producers



that refuse to offer this flexibility will be shunned or made to absorb the cost of bearing the risk of unhedged trade.

In practice this will mean that buyers will face locational arbitrage that will be too costly to manage through derivatives. Producers might have to sell on a delivered basis, taking the risk of timing of delivery and freight onto their own shoulders, and deals on an f.o.b. (free on board) basis will be limited to commodity traders who may not be able to bear the price risk purely through offsetting European-based derivatives, but only through back-to-back trades. This will inevitably result in producers having to accept lower prices, and consumers higher prices, because that will be the only safe way for the commodity supply chain to carry the risk. It will also probably result in variable pricing terms, or more pricing formulas, as commodity firms try to minimize their risk exposure and maximize their opportunities – the result of which will be less transparency. And all of this will increasingly occur outside the EU.

#### **Intentions of EU policy makers – and consequences**

European policy makers had desired to eliminate fraud and market manipulation, but their efforts will result in eliminating liquidity. It is the Vietnam War strategy in regulation: there may be a 'bad guy' in the village, even if he cannot be seen, so to eliminate him it is necessary to destroy the village.

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**'EUROPEAN POLICY MAKERS HAD DESIRED TO ELIMINATE FRAUD AND MARKET MANIPULATION, BUT THEIR EFFORTS WILL RESULT IN ELIMINATING LIQUIDITY.'**  
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In Europe this is not necessarily considered to be a 'bad' outcome because 'trading' is regarded as an inherently suspicious, if not immoral,

activity amongst the political left and parts of the political right. There is a communication paradox when the industry and policy makers meet. Any discussion within the industry on price identification and market robustness will ultimately focus on the importance of liquidity, because liquidity brings transparency and robustness to pricing and provides the stability of depth of market. But most of the policy making infrastructure in the EU, whether at European Parliament level or within the Commission, is intrinsically distrustful of liquidity, as it is considered 'excessive speculation'. Imposing restrictions and costs on liquidity is often seen as a 'good' outcome by policy makers. Yet the new regulation, by affecting what the policy makers can 'see' (standardized derivatives trades), will have the unintended consequence of driving price risk management into formulations that officials cannot 'see', such as bilateral physical supply contracts with embedded optionality.

#### **MiFID II and European benchmark regulation**

MiFID II is law but has yet to come into effect; its impact will become apparent over the next two years. Not yet law, but in the process of becoming so, is the European benchmark regulation. This regulation is in 'trilogue', the process that seeks an agreed final text from the European Commission's initial proposals, and amended versions of the text from the European Parliament and the Council of Ministers.

The Commission's text on benchmarking law was issued two years ago and was a poor piece of legislative drafting. By failing to understand the difference between financial markets and physical commodity trade, the text was full of errors and misunderstandings. It was rightly criticized widely. The text has been heavily amended by both

Parliament and Council, to the extent that both have rewritten large parts of the proposals. The Council text accepts and understands that trade in commodities is different to that in financial instruments, and so reflects a better approach. But the Parliament has better third-country regime proposals; these will be critical, as trade in commodities is global and not confined to a single national jurisdiction.

#### **Differences between EU and global approach**

There will be unintended consequences from the EU's benchmarking proposals because Europe seems intent on deviating from a globally agreed and workable consensus on oil benchmarks. The G20 leaders' meeting in Seoul commissioned a work stream that produced a report known as the IOSCO Principles for Oil Price Reporting Agencies in October 2012. This report, produced by the International Organization of Securities Commissions (IOSCO), in collaboration with OPEC, the IEA, and the IEF, established a framework of best practices for producing assessments which are referenced by oil derivative contracts.

But IOSCO's 'principles-based approach' is considered inappropriate by Brussels, which favours a 'rules-based approach'. The European Commission, somewhat arrogantly, expects the world to follow its lead in designing legislation to codify these principles, and indeed to go substantially beyond them. Significantly, the position of the US administration, the US Congress, and the US regulator (the CFTC), is that no specific regulation on benchmarks is necessary or even appropriate. The IOSCO Principles for Oil Price Reporting Agencies work and should be allowed to work. Poorly drafted legislation will not work as intended, not least



because it has the potential to threaten what has hitherto been a secure flow of oil to consumers, by failing to allow the market to represent fundamentals through a freely determined open market price.

In practice what does this mean? Well, unsurprisingly the Americans seem to be getting it right on benchmarks, partly because they made their mistakes earlier in Dodd–Frank, and the CFTC have been trying to rectify some of these mistakes. The CFTC has also seen the unintended consequences on liquidity in financial markets, especially for US Treasuries, of restrictive legislation. The European Commission, as always, seems intent on making its own mistakes regardless of the impact on European citizens. It is noticeable that it is the elected European representatives, rather than doctrinaire officials, who are more concerned with the impact of bad regulation on people's living standards. Much will now depend on whether the Europeans and the US authorities can create a workable third-country regime. If they don't, it is likely to be European

companies and consumers that will suffer.

### **Record of industry success in maintaining supply**

Keep in mind that there has been no market-induced breakdown in the supply of oil to the consumer in recent history, even during times of intense price volatility. This is a tribute to the industry, which has supplied oil to the consumer when production, transportation, and consumption have all been threatened by wars, political unrest, and misplaced policy. The industry has gained little public recognition for this. Ironically the biggest threat to the cost-efficient supply of oil to the European consumer now comes from a developing regulatory regime that was supposed to provide the consumer with protection.

It is feared that European regulation, however well-intentioned, is having and will continue to have consequences which are opposite to those envisioned by the policy makers. Liquidity will be reduced; transparency will decline;

volatility will increase; standardization of contracts will cease; physical commerce will remain off electronic platforms; and inherent risk will be injected into the market rather than removed.

### **Probable consequences of regulation**

Oil will still flow from producer to consumer, but the direct costs of regulation and the consequential costs of carrying the new and implied risks will be borne by the consumer. Hopefully, for the consumer, the fall in the price of oil will to some extent offset these additional costs of regulation.

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**'WHEN POLICY MAKERS INTERVENE IN THE WORKINGS OF A FREE MARKET, THE EFFECT IS INVERSELY PROPORTIONAL TO THE INTENT.'**  
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The basic rule of much regulation continues to true, especially when applied to global trade: when policy makers intervene in the workings of a free market, the effect is inversely proportional to the intent.



## **OTC derivatives market regulation and commodity derivatives**

Orçun Kaya

In the wake of the financial turmoil, over-the-counter (OTC) derivatives have become the focus of attention. Indeed, the market size is gargantuan with a notional volume of USD 630 trillion, and it dwarfs the exchange-traded derivatives that have a notional volume of only USD 65 trillion. To date, a significant part of OTC derivatives trades has been handled by a small number of dealers that are the main counterparties of practically all other market participants. In the eyes of regulators and policy makers, the OTC derivatives'

market size, interconnectedness, limited transparency regarding the counterparty exposures, and market participants' insufficient risk management practices have intensified the impact of the financial crisis and thus are potential sources of heightened volatility and systemic risks. Against this background, the G20 leaders agreed at their Pittsburgh meeting in 2009 to undertake reforms, intending to increase transparency and reduce counterparty risk in the OTC derivatives markets.

### **Early commitment, lengthy implementation**

The main pillars of the derivatives market reforms are that:

- 1 all derivatives trades should be reported to trade repositories,
- 2 standardized OTC derivatives should be centrally cleared and traded on organized venues, and
- 3 non-cleared derivatives should be subject to higher margining requirements.

The Dodd–Frank Act in the USA, the European Market Infrastructure

Regulation (EMIR), and the Markets in Financial Instruments Directive (MiFID) in Europe are the main bodies of legislation for OTC derivatives reporting, central clearing, and exchange-trading rules. The initial implementation deadline was set by the G20 for the end of 2012; however, it was not met by any of the jurisdictions. Almost three years after the targeted deadline, rule making and implementation of those rules have been finalized only in the USA, and this only recently. Meanwhile, cross-border rules and margin requirements for non-cleared derivatives are expected to be finalized by the end of 2015. Europe lags even further behind, and reporting requirements did not start before 2014. The clearing obligation is expected to take effect in 2016. Equivalence determinations have been progressing slowly also in Europe. Since the lion's share of derivatives trades takes place either in the USA or in Europe, other jurisdictions are waiting for the USA and the EU to clarify their regulations and cross-border agreements. For this reason, rule making has just begun in several jurisdictions and progress varies across regions.

Global implementation of these new rules is already far behind the planned timetable. The uncertainty regarding the schedule is of concern for market players and may lead to regulatory arbitrage. An even more important point for market participants is the mutual recognition of central clearing rules, especially between the USA and the EU. Little progress has been achieved on this front so far. This may result in double application of clearing and margining requirements, thereby causing prohibitively high derivatives trading costs.

#### **Large exchange-trading volume for commodity derivatives**

OTC derivatives markets are particularly relevant for the commodity derivatives

segment due to the tailored structure of these contracts. In a nutshell, end-users of commodity derivatives aim to hedge their exposures to price changes of the underlying raw materials such as crude oil, natural gas, precious metals as well as agricultural commodities and livestock. As derivatives market regulation has been tightened up in recent years, commodity derivatives have experienced severe regulatory treatment too. Both Dodd–Frank and EMIR requirements such as central clearing, mandatory reporting, and higher capital charges for non-cleared derivatives apply to commodity derivatives. That said, in both jurisdictions there are exemptions for certain products, such as physically settled commodity swaps or forwards, and counterparties. There is broad usage of commodity derivatives and trading takes place on both organized exchanges and on OTC markets. Before the crisis, OTC commodity derivatives transactions expanded exponentially and outstanding notional amounts jumped from USD 598 billion in 2000 to USD 13,299 billion in 2008.

#### **‘AMONG THE OTC DERIVATIVES TRADED, THE COMMODITY DERIVATIVES MARKET SHARE IS ALMOST NEGLIGIBLE ...’**

With the outbreak of the crisis, this trend reversed and outstanding amounts dropped steadily to USD 1,868 billion in 2014. Among the OTC derivatives traded, the commodity derivatives market share is almost negligible and stands at around 0.3 per cent of the outstanding notional amounts. That said, notional amounts are largely inflated, so this means they could be somewhat misleading indicators of economic relevancy. Put differently, counterparties are seldom required to pay out the full value of some derivatives in the OTC landscape; for example, interest rate swaps have huge face values but they are hardly

ever actually exchanged between contracting parties. The exchange-traded commodity derivatives in this vein present an integral picture for the use of commodity derivatives in financial markets. Up from 1.2 billion in 2012 and 3.1 billion in 2013, almost 3.6 billion commodity contracts were traded on exchanges in 2014. This corresponds to around 17 per cent of the total exchange-traded derivatives, which is certainly a significant share.

Exchange trading of commodity derivatives has become widespread in recent years and a divergence between OTC versus exchange-trading volumes is evident. Regulatory pressure to encourage trading on exchange platforms seems to have created some impetus for greater use of these platforms. The high degree of exchange trading of commodity derivatives may also point to an increasing role of institutional investors in this market segment. A large degree of standardization and financialization of commodity derivatives, in particular, would make reporting requirements to trade repositories easier for these products.

#### **Standardization alone is not enough for clearing eligibility**

Among the agreed reforms, the mandatory central clearing of OTC derivatives by central clearing counterparties (CCPs) is a drastic change that forces market participants to revise their existing risk management and collateralization practices. To achieve more transparent, efficient, and robust derivatives trading, CCPs interpose themselves between the trading counterparties and become a buyer to every seller and a seller to every buyer in a derivatives trade. Meanwhile, to maintain their soundness, CCPs have stricter collateralization standards than bilateral trades, such as higher initial margin



requirements and more frequent variation calls, as well as contributions to CCPs' default funds (waterfall of resources).

In recent years there has been a significant move from bilateral non-cleared trades to CCPs for certain asset classes. In 2015, for example, around 48 per cent of interest rate swaps have been centrally cleared by the CCPs, up from 34 per cent in 2011. Similarly, a remarkable 21 per cent of credit default swaps have been centrally cleared, up from 11 per cent in 2011. However, central clearing of commodity derivatives has been very limited to date. This is probably due to bespoke features of commodity derivatives and their liquidity characteristics. Expressed differently, the recent uptick in exchange trading may point to the adaption of some commodity derivatives to the standard definitions and confirmation agreements. Standardization of the derivatives contracts is a prerequisite for central clearing eligibility, yet it is certainly not the only criterion. For central clearing eligibility, liquidity and associated efficient pricing are a *sine qua non* that needs detailed elaboration.

### **Liquidity creates a bottleneck for central clearing**

One of the key determinants of a CCP clearing decision is the degree of liquidity. Indeed, in case of a counterparty default, liquidity characteristics of derivatives are crucial for CCPs to manage the portfolio of the defaulting clearing member in a timely and efficient manner. As a result, CCPs primarily accept liquid derivatives that are less volatile and have relatively robust reference entity characteristics for central clearing. The number of trades in commodity derivatives sub-segments sheds some light on the liquidity characteristics of these assets. In 2014, almost one-third

of the commodity derivatives traded on exchanges were agriculture derivatives. Energy and non-precious metals derivatives constitute 28 per cent and 21 per cent of the trades, respectively. Other sub-segments of commodity derivatives, such as precious metals and other materials, have relatively few transactions. These are usually tailored products that are designed to meet the specific needs of counterparties and as a result are traded much less. Due to their lack of liquidity, CCPs will be less likely to offer clearing services for these products. This implies that a large proportion of the bespoke commodity derivatives will remain non-cleared as there will be no clearing house ready and willing to clear them.

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**'... IT IS LIKELY THAT THE TRADING OF PARTICULAR COMMODITY DERIVATIVES WILL BE PROHIBITIVELY EXPENSIVE ...'**  
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In order to promote central clearing and to ensure that sufficient collateral is collected, policy makers imposed substantially higher margin requirements and additional capital charges for non-centrally cleared derivatives trades. To define the cornerstones of the additional measures, the BCBS-IOSCO (Basel Committee on Banking Supervision and the International Organization of Securities Commissions) has released a framework and set the initial margin requirements for non-centrally cleared commodity derivatives to 15 per cent of the notional exposure. After the full implementation of the reforms it is likely that the trading of particular commodity derivatives will be prohibitively expensive and they might be unattractive at the free-market price. In this respect, market participants using these instruments for hedging purposes may need to revise their practices and business models.

### **Cost of central clearing will probably be passed on to end-users**

Before the crisis, longstanding trading relationships of counterparties with high creditworthiness allowed flexibility for bilateral derivatives trades. By contrast, CCPs have strict rules on initial and variation margin requirements and offer much less flexibility to negotiate. As a result, the cost of derivatives trading will significantly increase for the centrally cleared products. In the eyes of some observers, the additional costs will eventually be passed on to the end-users (buy-side clients) of derivatives contracts. In short, there are three different types of transactions in derivatives markets. The first type of transaction takes place between two dealers that trade for market making and liquidity. These types of trades are probably the least of concern for regulators. The second type of transaction occurs between a dealer and a financial end-user such as a pension fund, insurance corporation, or asset manager that is trying to hedge for risk in their portfolios. The third type of trade takes place between a dealer and a non-financial end-user that aims to reduce balance-sheet volatility, eliminate uncertainty in their cash flows, and mitigate risk for their future investment plans. The last two types that try to hedge their business risks are of particular concern for the policy makers.

Figures from ISDA (the International Swaps and Derivatives Association) may help to delve deeper into the composition of traders in the OTC landscape. In 2013, around 16 per cent of the derivatives trades took place between two dealers, down from 28 per cent in 2012. A striking 80 per cent of the transactions meanwhile are between a dealer and a financial institution, and around 3 per cent are between a dealer and a non-financial end-user. If the cost of central clearing is passed on to financial and non-



financial end-users via higher spreads etc., this could have implications for the real economy. Expressed differently, the heightened hedging costs of financial and non-financial firms may lead to unhedged positions and thereby more volatile balance sheets and subdued investment levels.

#### Uncertainty regarding the hedging criteria in Europe

Taking into account the potential side effects of the new regulatory reforms on the real economy, regulators on both sides of the Atlantic have introduced central clearing exemptions for non-financial counterparties (NFCs) that engage in derivatives transactions to hedge or mitigate commercial risk. For example, NFCs are not subject to the mandatory central clearing requirement under EMIR on the

condition that notional amounts of their derivatives trades are below certain thresholds. Notwithstanding, the European Securities and Markets Authority (ESMA) has recently released a report recommending the removal of the hedging criteria for NFCs. The background reason is to simplify NFC definition along with the fact that hedging may not be the most relevant criterion in determining the systemic relevance of NFCs. However, the exemptions for NFCs that hedge a commercial risk are particularly important for the commodity derivatives segment, considering that NFCs are vital and important market participants. More specifically, another report from ESMA shows that among different OTC derivatives the share of the NFCs is the largest in commodity derivatives: they account for one-fifth of the gross notional amounts traded. Of these,

80 per cent are below the threshold defined by EMIR. In this light, changes in the hedging criteria as recently recommended may have negative consequences for NFCs that trade commodity derivatives.

#### ‘... THE NEW RULES AND REGULATIONS WILL FUNDAMENTALLY CHANGE THE DERIVATIVES MARKETS ...’

All in all, the new rules and regulations will fundamentally change the derivatives markets after their full implementation. It remains to be seen to what extent they will affect the pricing, liquidity, and trading of commodity derivatives.

*All the usual disclaimers apply; in particular, the views expressed herein are my own and do not necessarily reflect those of Deutsche Bank AG or Deutsche Bank Research.*



## MiFID II: the impact on commodity markets from a venue perspective

Ben Pott and Graham Francis

Commodity derivative markets have been a cornerstone of modern financial services since the Big Bang in 1986. The ability of end-users to hedge their commodity exposures and anticipate price movements has ultimately had a stabilizing effect on end-user prices and, together with deepening liquidity in these markets, has led to tighter bid-offer spreads, again leading to reduced costs for the end-users. This link between end-users and financial trading is perhaps unique in financial markets. It means that changes to the trading landscape can have direct consequences on the price at the pump, or on the household energy bill at the end of the month.

However, commodity markets – like any other financial market – have not been

immune to the effects of the 2008 crisis. Over-extension and a speculative bubble have led to market participants' failure, with knock-on consequences for investors. Whereas other markets have experienced a withdrawal of liquidity as banks had to rein in their trading books, the commodity sector has seen a more dramatic change in participation – away from the traditional broker dealer banks towards trading houses, often based outside of the European Union perimeter.

However, commodity markets today are still experiencing the turmoil of the post-

#### ‘... COMMODITY MARKETS TODAY ARE STILL EXPERIENCING THE TURMOIL OF THE POST-CRISIS REGULATORY REFORM PROGRAMME.’

crisis regulatory reform programme. Whereas bank reform has changed the face of participation, it is market-specific reform – Market in Financial Instruments Directive (MiFID) II – which will have a more profound impact on the intermediated commodity markets. This paper sets out not just the future challenges faced by participants but also focuses specifically on the reorganization and reshaping that is required by these intermediaries – today's brokers and trading venues.

#### Background

MiFID II will be a key milestone in commodities trading markets. The requirements to trade on venues (trading obligation), together with the organizational requirements on

The key differences between MTFs and OTFs		
	Multilateral trading facility (MTF)	Organized trading facility (OTF)
Product coverage	All financial instrument	Non-equities only
Type of execution	Non-discretionary only	Discretionary
Restrictions	Cannot execute against own capital or matched principal	Cannot execute against own capital but can operate as matched principal
Participation	Authorized participants only	Can be unregulated
Conduct requirements	Limited application	Full applicability of conduct requirements including best execution

intermediaries to trade as a trading venue – either a multilateral trading facility (MTF) without discretion or an organized trading facility (OTF) with discretion in execution – as well as the extension of the scope of participants beyond the core financial counterparties, will all lead to a significantly different trading landscape come 2017. For commodities markets specifically, the key changes will bring firms with significant ancillary trading activities into scope, and introduce a novel position limits regime. It will also carve up wholesale energy markets between financial markets and non-financial markets, traded only on OTFs or bilateral, and in products that ‘must physically settle’.

#### Drawing a wider perimeter of regulated firms

Much has been written about the commodities firms coming into scope by losing their MiFID I exemptions – including blanket exemptions for commodity dealers and firms trading on their own account. In combination with the expiration of Capital Requirements Directive (CRD) IV exemption from capital requirements for commodity dealers in late 2017, the impact on corporate users of commodity derivatives will be significant. Some have estimated the total cost impact to be in the region of £ billions – including Shell which stated that the total

additional regulatory capital they would have to hold would be in the region of USD 30 billion (see the article ‘EU traders and energy groups braced for MiFID II guidance’ by Neil Hume, 23 September 2015, *Financial Times*).

Worse still, firms may not have much time to prepare for this regulatory tsunami. Whilst the technical standards now allow for an enhanced monitoring period from July 2015 to 30 June 2016, and a starting date for notifying the competent authorities by 1 July 2017, total market size is still unknown and will be difficult to obtain. Even then, firms will have to seek recognition from their regulatory authorities, which is likely to take at least six months. Consequently, participants won’t be in a position to know if the market

test takes them outside of MiFID II, but will instead need to prepare for MiFID II rules by taking a conservative view – whether they are likely to breach the volume thresholds set out in the regulatory standards (see below) or not.

In addition, there are concerns that the current main business activity test is too narrowly focused on trading activity – the test will see firms calculate their position in derivatives and EU allowances, and measure this against their overall position. This will then give a percentage figure which represents how much of their trade is proprietary or speculative. Many in the industry believe that this test does not reflect the political agreement for MiFID II, which was meant to measure trading activity against the whole business of a company, not just its trading activity.

#### OTFs – commodity brokers of the future

From a venue perspective, the issue of classifying customers is less relevant. The key challenges are of an altogether different nature.

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**‘THE VENUE CLASSIFICATION HAS AN ULTIMATE BEARING ON THE NATURE OF THE INSTRUMENT BEING TRADED.’**  
 .....

Firstly, the venue classification has an

Volume thresholds set out in the MiFID II regulatory standards	
Product	% threshold
Derivatives on metals	4%
Derivatives on oil and oil products	3%
Derivatives on coal	10%
Derivatives on gas	3%
Derivatives on power	6%
Derivatives on agricultural products	4%
Derivatives on other commodities, including freight and commodities referred to in Section C 10 of Annex I to Directive 2014/65/EU	15%
Emission allowances or derivatives thereof	20%

ultimate bearing on the nature of the instrument being traded. Venues holding themselves out to be MTFs will soon discover participants in wholesale energy products asking for an OTF licence. This is simply because, at that point, certain wholesale energy products fall outside the scope of MiFID and inside that of REMIT (the Regulation on Energy Market Integrity and Transparency). Only OTF wholesale energy products fall outside the definition of a 'financial instrument'. Whilst REMIT still requires reporting of

transactions and monitoring for abuse, the set of requirements is less onerous. Even more significantly, REMIT transactions do not count towards the MiFID II ancillary activities thresholds which, in turn, may keep a firm outside of MiFID II and associated CRD IV requirements.

The majority of organizational requirements would still apply to an OTF, such as market monitoring, access requirements and, potentially, algo testing requirements (if required).

However, pre- and post-trade requirements, trading obligations, position limits, and best execution reporting requirements would not apply – a major incentive for participants to deal in wholesale energy products that are outside of the financial instrument definition.

#### Transparency calibrations

Secondly, venues will have to abide by a host of transparency requirements, both pre- and post-trade, depending

Energy commodity futures / forwards					
For the purpose of the determination of the classes of financial instruments considered not to have a liquid market as per Articles 6 and 8(1)(b), each sub-asset class shall be further segmented into sub-classes as defined below				Each sub-class shall be determined not to have a liquid market as per Articles 6 and 8(1)(b) if it does not meet one or all of the following thresholds of the quantitative liquidity criteria	
				Average daily notional amount (ADNA) [quantitative liquidity criterion 1]	Average daily number of trades [quantitative liquidity criterion 2]
An energy commodity future/forward sub-class is defined by the following segmentation criteria: <b>Segmentation criterion</b> <b>1</b> – energy type: oil, oil distillates, coal, oil light ends, natural gas, electricity, inter-energy <b>2</b> – underlying energy <b>3</b> – notional currency defined as the currency in which the notional amount of the future/forward is denominated <b>4</b> – load type defined as baseload, peakload, off-peak or others, applicable to energy type: electricity <b>5</b> – delivery/ cash settlement location applicable to energy types: oil, oil distillates, oil light ends, electricity, inter-energy <b>6</b> – time to maturity bucket of the future/forward defined as follows:				EUR 10,000,000	10
Maturity bucket	Oil/ oil distillates/ oil light ends	Coal	Natural gas/ electricity/ inter-energy		
1	0 < time to maturity ≤ 4 months	0 < time to maturity ≤ 6 months	0 < time to maturity ≤ 1 month		
2	4 months < time to maturity ≤ 8 months	6 months < time to maturity ≤ 1 year	1 month < time to maturity ≤ 1 year		
3	8 months < time to maturity ≤ 1 year	1 year < time to maturity ≤ 2 years	1 year < time to maturity ≤ 2 years		
4	1 year < time to maturity ≤ 2 years				
m	(n–1) years < time to maturity ≤ n years	(n–1) years < time to maturity ≤ n years	(n–1) years < time to maturity ≤ n years		

on the nature of the instrument (liquid vs illiquid) and the size of the order transmitted (greater or smaller than 'large in scale') – the latter being the equivalent of the well-known block-size thresholds in operation today. An additional threshold is available where products are traded by voice or by RFQ; where an order exceeds this size (specific to the instrument threshold) only indicative bids or offers have to be made pre-trade transparent.

This complex web of thresholds should have become clearer once the European Securities and Markets Authority (ESMA) published its regulatory technical standards in late September this year. Whereas block-size thresholds used to be set by the exchanges, they are now defined by the regulatory authorities. Initially, technical standards setting out liquidity determinations and size thresholds were expected by July but were then delayed until late September. One key challenge was (and still is) the lack of market data – a key factor that may have contributed to the draft thresholds in a December 2014 consultation paper

by ESMA being out of line with market expectations and practice.

The latest set of technical standards now sets out thresholds for determining whether a given product is indeed liquid. Products would only make that list if their average daily notional amount is above EUR 10 million or if they are traded more than 10 times per day on average. The table opposite, Energy commodity futures/forwards, lists the example of 'liquid' energy commodity futures as identified by ESMA.

To determine the 'large-in-scale' (LIS) and 'size specific to the instrument' (SSTI) thresholds, ESMA has opted for a percentile approach; in other words, setting expectations around how much trading of a given liquid product should take place at sizes below and above the thresholds. The table below, Percentiles and threshold floors, illustrates the case of energy commodity futures.

The hope now is that ESMA can find a suitably comprehensive data set – including both on exchange and over-the-counter (OTC) traded contracts – for the commodities markets, and

set thresholds that are more reflective of the current trading environment. In the absence of aggregating sufficiently high quality data, a phase-in approach may be appropriate. Given that MiFID II will introduce robust reporting requirements from 2018 onwards a more accurate calibration should be possible in time.

Getting the thresholds wrong could clearly have significant impact on the commodities markets; in particular it could damage liquidity in those markets and may result in trading in certain asset classes, especially where seaborne, being driven out of the EU.

### Position reporting

Venue trading in Europe will also be impacted by the provisions on position reporting. MiFID II requires participants to report their and their clients' positions to the venue in order for the venue to publish aggregate positions and report onwards to the competent authorities a detailed position breakdown. The requirement is embedded in the legislative text itself

**Percentiles and threshold floors** (to be applied for the calculation of the pre-trade and post-trade SSTI and LIS thresholds for the sub-classes determined to have a liquid market)

Sub-asset class*	SSTI pre-trade		LIS pre-trade		SSTI post-trade			LIS post-trade		
	Trade – percentile	Threshold floor	Trade – percentile	Threshold floor	Trade – percentile	Volume – percentile	Threshold floor	Trade – percentile	Volume – percentile	Threshold floor
Energy commodity futures/forwards**	60	EUR 250,000	70	EUR 500,000	80	60	EUR 750,000	90	70	EUR 1,000,000
Energy commodity options**	60	EUR 250,000	70	EUR 500,000	80	60	EUR 750,000	90	70	EUR 1,000,000
Energy commodity swaps**	60	EUR 250,000	70	EUR 500,000	80	60	EUR 750,000	90	70	EUR 1,000,000
Agricultural commodity futures/forwards**	60	EUR 250,000	70	EUR 500,000	80	60	EUR 750,000	90	70	EUR 1,000,000

\* Transactions to be considered for the calculations of the thresholds.

\*\* Calculation of thresholds should be performed for each sub-class of the sub-asset class considering the transactions executed on financial instruments belonging to the sub-class.



and is no longer subject to review by ESMA or the competent authorities. However, the practicalities of the process could have a significant impact on commodities markets today.

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**‘VENUE TRADING IN EUROPE WILL ALSO BE IMPACTED BY THE PROVISIONS ON POSITION REPORTING.’**  
 .....

Under the proposed rules, a venue – including brokers – would be in possession of the complete position breakdown of every single participant on any given day. This raises serious questions around data confidentiality, especially in markets where trading is fragmented across platforms. This issue becomes even more relevant for third-country firms; the obligation to report positions rests with the venue, but the likelihood of getting accurate information from firms that are outside the scope of MiFID II is likely to be remote.

Similar questions arise in the context of transaction reporting where the venues are required to report on behalf of non-MiFID firms but where the data is unavailable to the venue itself (fields currently include a short selling flag, decision- and trader identification, etc. ...).

If venues and brokers find themselves in a position where they are not able to get the position and transaction reporting information, the question of consequences will undoubtedly have to be answered. Taking a hard line and expelling participants from the venue will only result in reduced and potentially fragmented liquidity, ultimately harming end-users.

A more successful approach would be to require participants to self-report positions and, in the case of third-country participants, to find a mutual approach for cross-border recognition of trading firms, ensuring pooled liquidity can continue delivering best value for end-users.

#### Trading venues of the future

The future for inter-dealer brokers and other intermediaries in the commodities markets has been written – the path towards reorganizing as a trading venue is set. However, big question marks will have to be answered before the commodities’ space is ready for MiFID II.

Key is the setting of transparency thresholds and the liquidity calibration

– it will determine to what extent intermediation, in today’s sense of the word, can continue. If full pre-trade disclosure were to be required, many markets may well be starved of liquidity, and trading would migrate to dark pools in related assets, or move into third-country markets with lesser transparency requirements.

As highlighted, the organizational form of the venue itself will be dependent on the asset traded. In the case of wholesale energy products, some OTC-intermediated business may migrate to OTFs to make full use of the non-financial product definition.

Beyond those key points, much of what used to be determined by exchanges will now be set by regulatory authorities. And therein lies a risk – whereas a wrongly calibrated size threshold at one exchange might have encouraged traders to block their trades elsewhere, this is no longer possible. Now a wrongly calibrated size threshold which has to be applied across venues will result in the disappearance of liquidity.

Whatever happens next, and wherever these thresholds ultimately come out, the face of the commodities markets is set to change significantly.



## Regulatory change: impact on major energy companies and challenges they face

Jonathan Hill

### Introduction

The international policy response to the financial crisis in the 2000s has presented an extremely challenging agenda for the energy sector. On the whole, this challenge should be cautiously welcomed. Through these policy initiatives, society is demanding more of the financial services sector in

order to rebuild trust and to encourage improved market functioning in years to come. However, the energy sector should rightly look for, and assertively present, unintended consequences where it foresees them, as a means of constructive response. These concerns are: the result of commodity markets (including physical commodity markets) being made subject to the

same regulations as other financial markets, and the distinction between group funding activities for investment in exploration and production, from physical commodity trading.

### Not systemic

The primary objective of the reforms, led by the G20 group of countries, has



been to reduce systemic risk to the financial system. Our sector's key response to this, which has largely fallen on deaf ears to date, is so fundamental that it must still be made and continually remade. Oil and gas producers and their physical commodity markets aren't big enough, nor do they have sufficient leverage, to pose systemic risk to the financial system.

### Appropriate mitigation?

The reforms are well documented and are covered by at least one other contributor to this edition of the *Forum*, giving a good overview of the provisions. Let me not restate them. Rather, let's get straight to the reality of dealing with the new requirements.

The point on systemic risk remains fundamental. Notwithstanding this, where there are risks which impact market confidence, they should be appropriately mitigated.

### Challenge of implementation

The pace of reform and introduction of new directives is unlike anything previously experienced in the financial services sector. Political imperatives, in support of real financial concerns arising from the 2008 crisis, have driven the timetables for the current reform round. This has been good, because it has required timely response and change from participants and regulators alike, to start addressing the need to rebuild public confidence.

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**'THE PACE OF REFORM AND INTRODUCTION OF NEW DIRECTIVES IS UNLIKE ANYTHING PREVIOUSLY EXPERIENCED IN THE FINANCIAL SERVICES SECTOR.'**  
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On the other hand, grappling with the need to respond has been extremely challenging, and has created much inefficiency. It seems that each time more light is shed (for example, when

a new Regulatory Technical Standard is published) it gets darker in key localities as new questions emerge. In turn, even with the best of intentions, subsequent guidance in the form of 'Questions & Answers' documents leads to more questions, and so it goes on. The Q&As have no legal status, yet it would be a brave company which decided not to heed them.

Uncertainty is therefore the only certainty. A company inevitably reaches a point when it must either press ahead with implementation, or not. In late 2013 the energy industry continued a close dialogue with regulators and some were convinced that reporting of exchange-traded derivatives under EMIR (European Market Infrastructure Regulation) would be delayed, owing to clear technical difficulties. It was not, however, and a subsequent scramble to implement the rules ensued.

Another example falls on those companies, due to a breach of the commodity threshold under EMIR, that are designated NFC+ (non-Financial counterparty above a dealing threshold). These companies are to benefit from a delay to central clearing [until late 2018] on treasury hedges, whereas those same companies will have to source personnel, set up new systems and processes, and incur regret spend throughout 2016 in order to comply with bilateral collateralization requirements in early 2017 and then repeat the process in respect of central clearing too. Only those OTC (over-the-counter) hedges not capable of central clearing will be subject to bilateral collateralization after 2018, meaning that much of the 2016 work will then be redundant. Again, the timing and a lack of appreciation of the impact on the oil and gas industry leads to frustrating and expensive consequences.

As MiFID II implementation approaches, the key Ancillary Activity test will be impossible to calculate until

July 2016 (when ESMA – the European Securities and Markets Authority – is scheduled to publish the market size denominator) and yet MiFID II comes in to force just six months later. Prudence dictates that companies who are in any doubt as to whether they will be in scope should ready a MiFID II licence application, but they may well not be needed and this will lead to regret spend. The calls for delay are starting, including one could infer from some regulators, but will they be listened to?

The platform can be a moving one. The interaction of MiFID (Markets in Financial Instruments Directive) and MAR (Market Abuse Regulation) presents a further example. MAR comes into force in June 2016, referencing the list of financial instruments in MiFID I. Six months later MiFID I is superseded by MiFID II with a much wider list of financial instruments and hence the scope of MAR will be broadened significantly.

### Compliance challenge

No one said it should be easy. It certainly isn't. There is considerable cost and the benefits are not always clear.

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**'ON THE FACE OF IT, HOW DIFFICULT CAN IT BE TO REPORT, ON A DAILY BASIS, DETAILS OF THE TRANSACTIONS A COMPANY ENTERS INTO?'**  
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On the face of it, how difficult can it be to report, on a daily basis, details of the transactions a company enters into? It has, though, proven very difficult across the reporting chain (submitter–repository–regulator) and both policy and operational issues continue to emerge. Participants are working on ESMA's level II validation for EMIR reporting 18 months on, which means the value of the data at present held in the repositories must be limited.

However, is it the right data?

Participants are certainly submitting the data as requested, with considerable effort. The original mandate from the G20 was to monitor for emerging systemic risk, and the initial response from the regulators was to take position data from companies. The EMIR OTC reporting requirements, however, are for a log of trade reports, which indicates a different purpose. It is interesting that an industry-negotiated compromise with the regulators over the requirements has led to position reporting being implemented for exchange-traded derivatives in place of the trade reports. Can the original purpose be fulfilled? Arguably, the MiFID position reporting, which will be implemented for commodity derivatives markets from January 2018, looks more as if it could address this, although given that commodities are not systemic, its restricted scope would prevent this.

As indicated above, this is a step change in the amount of regulation on the energy sector. The political imperative has mandated that there shall be position limits on every commodity derivatives contract, meaning that there will be thousands. Everyone knows the application is too wide, and that it would be far more impactful to focus on the key contracts.

Something as apparently basic as tracking position limit requirements will be a very significant compliance challenge. In practice, ESMA sets the framework, but the 28 National Competent Authorities (NCAs) set the limits. Will their approaches align? Will they coordinate when the limits change? This is also an example of how companies will have to work with far more regulators in more jurisdictions; it is potentially a departure from the passporting concept of reliance on the home state regulator, which was a key deliverable of MiFID I.

Dealing with more regulators is a particular issue for companies active in the wholesale power and gas markets, who are likely now to be regulated by both the Agency for the Cooperation of Energy Regulators (ACER) member in their country of domicile for REMIT (Regulation on Energy Market Integrity and Transparency) for physical business, and by NCAs for financial business (under MAR, MiFID, and others). The two constituencies' jurisdictions should not overlap and cooperation between them must be hoped for. Operationally though, it is a reality of the markets that there will be considerable overlap and firms will have to be very precise in their dealings on the boundary.

#### **Working capital impacts**

The complexity of compliance and uncertainties of implementation are very significant, but there are highly material commercial impacts as well.

Energy market participants who exceed an EMIR clearing threshold will be required to post margin in clearing houses and to exchange collateral on remaining OTC transactions. This outcome may occur even where a corporate's market activity is overwhelmingly in hedging (which may be discounted from the calculation) due to uncertainty of how to classify hedging in a compliant way. These costs may be very appreciable.

This is, moreover, required in all asset classes, not just the one which breaches the threshold. For corporates, as mentioned, this has the highly significant impact of bringing into scope corporate treasury hedging activity, since hedges have no exemption. This then makes the treasury business of impacted corporates uncompetitive, since they incur costs which peers who do not have oil and gas trading businesses will not have. In contrast the US regime

allows an end-user exemption to mandatory clearing.

The projected costs of the margining and clearing are very high, and these are in addition to the very high costs generated by the prospect of posting regulatory capital. Currently, there is an exemption in the EU Capital Requirement Directive for commodity trading firms but it expires at the end of 2017. But looking at a commodity derivatives trading operation, if margin is posted or collateralization made, what are the risks remaining which regulatory capital could appropriately mitigate?

The existing regime was designed for banks, and commodity firms were given exemption for various reasons, including their risk profile and the unsuitability of the regime to their businesses. It is hoped the exemption will be extended to 2020 and beyond, but the political mood seems clear that capital rules will be applied to our sector. The key point, however, is that commodity firms should not be subject to the same capital rules as banks, as they neither pose the same systemic risk nor are they eligible for the same public funding in times of strain. This does not mean that good risk management practice should not apply, just that it should be appropriate, and capital requirements are disproportionate.

Certain corporates active in the energy sector are on record as forecasting the cumulative impact of all of these charges as being from several to 'many' (a figure exceeding ten) billions of dollars. It is certainly true that application of the banking capital rules to a major corporate's oil and gas business generates a completely disproportionate outcome to the market risk they take.

These corporations are large, yet the possible calls upon their capital are material even to them. Their key mission is delivering energy and



that requires working capital for the associated infrastructure. To illustrate, an oil and gas producer might allocate an annual capital investment in its North Sea programme of a few billion dollars. However, going forward, the regulatory charges for its supply and corporate treasury operations which seek to hedge the associated risks of supply, distribution, and funding, would be likely to significantly exceed this.

### Operational impacts

Keeping on the theme of consequences which, when looking at the original legislation and when thinking about the purpose and functioning of our markets, must surely have been unintended, brings me back to MiFID position limits. Hedging of physical activity should be covered by a hedge exemption to the position limits. This was the working assumption of the industry during the negotiations. This has been the practice since position limits were first brought in.

#### ..... 'HEDGING OF PHYSICAL ACTIVITY SHOULD BE COVERED BY A HEDGE EXEMPTION TO THE POSITION LIMITS.' .....

However, wholesale changes to the MiFID ancillary exemption test look like bringing far more firms in to scope of the Directive than envisaged. In scope MiFID firms may not apply for a hedge exemption. The position limits will be set in a range of 5–35 per cent, which is pretty broad for planning purposes. Remember that the limits apply to every platform traded commodity derivative in Europe. Liquidity varies greatly between these contracts as do numbers of participants. Also, many of them reference pricing at key infrastructure points whereby positions much larger than 35 per cent at delivery are inevitable.

The operational consequences of this for individual firms and for key

infrastructure cannot have been fully scoped, but it will certainly create operational problems. Some markets cannot work within these numbers.

In addition, if you can get a hedge exemption it must be applied for in advance (up to 21 days). Inevitably there will be times when this impacts orderly operations.

### Impact on markets

The matters discussed above are just a small subset of the changes to regulation of our firms and markets that are forthcoming in the next few years. But what is the cumulative impact of all these changes? Certainly that is something impossible to predict.

First there is the prospect of participants relocating, which may in turn lead to markets relocating. Clearly this would negatively impact Europe's competitiveness as a region. Some participants are already indicating their intention to move jurisdiction to take advantage of differences. However, the sense of doing business where clients are based, and particularly where key infrastructure is located, remains. Can you sensibly trade European power from Singapore? Although in contrast, it may be possible to relocate capital market activities to other regions to eliminate the regulatory cost burden on corporate funding for NFC+ groups.

So, for participants who stay put, what they do know is that costs are highly material, even to the largest amongst them. There have been withdrawals from the markets, most notably bank proprietary trading activity which has been attributed to many factors, not least of which is the reported impact of capital rules on the activity which made it commercially unviable.

It could be argued, however, that banks trading proprietarily were voluntary market participants and, whilst their presence was to be welcomed as

valuable liquidity provision, it was not essential. These vastly increased costs are now spreading to more participant types. It is highly likely that there will be further withdrawals. In general, markets thrive on liquidity – which will be impacted to the detriment of the market.

Many point to small- and medium-sized physical participants for whom the compliance burden alone will necessitate a rethink. Certain big utility corporates have also stated that they will not tolerate the compliance costs.

These participant types are not optional; they are the participants without whom markets cannot exist. Certain policymakers have in the past said they would welcome the disappearance of the energy trading sector. Do they hold the same sentiment for the EU oil and gas production industry? Alternative suggestions, however, on how commodity pricing could be better achieved have not been forthcoming. Inefficient and ineffective pricing will ultimately only lead to negative outcomes for producers and consumers alike.

### What should happen next?

Inevitably, the preceding sections have focused largely on problems identified – the unintended negative consequences. However, it remains the case that the overall reform package and its intent is to be welcomed. Improved transparency, appropriately calibrated, is a positive development from which all can potentially benefit. Enhanced supervisory powers for regulators so they can achieve the

#### ..... 'IMPROVED TRANSPARENCY, APPROPRIATELY CALIBRATED, IS A POSITIVE DEVELOPMENT FROM WHICH ALL CAN POTENTIALLY BENEFIT.' .....



tough objectives they now have are also positive.

However, the number and extent of the changes is unprecedented. Given all of the uncertainty they engender, time is needed to assess impacts. We need to make the changes which have been put in to effect work. For example, it is reported that the quality of the data set from the EMIR reporting remains unsatisfactory and yet it is supposed to be the basis of so much which is of key importance. Also, I recall that the data was intended to be used to provide market, as well as regulatory,

transparency. This should be achieved before new reforms are advanced.

Further, where negative unintended consequences emerge, the community should respond quickly and make changes to correct them.

### Conclusion

The financial services sector must accept the need to repair public confidence and accept the utility of many of the reforms. Every participant, including those in the commodity sector, should embrace constructive compliance. Energy markets do,

however, fulfil a vital role and it is right that where we see negative consequences, we must highlight them and work hard to seek understanding. We need to do this to ensure they are put right, in order to safeguard investment in the EU and to encourage energy businesses worldwide to continue to view the EU as an attractive region in which to do business. This is for the good of our economies, our consumers, and our quality of life.

*This article is written in the author's personal capacity and should not be taken as reflecting BP's views.*



## A new regulatory paradigm for EU commodity markets

Jonathan Farrimond and Paul Wightman

From 3 January 2017, Europe's financial commodity markets will march to a different regulatory beat. The recast MiFID II (Markets in Financial Instruments Directive) and its sister regulation MiFIR (Markets in Financial Instruments Regulation) have, remarkably, been over five years in the making. But upon implementation, they are set to introduce sweeping changes to the structure and workings of EU financial commodity markets – or rather, the entire European Economic Area (EEA), as the legislation has 'EEA relevance' – impacting participants, trading venues, and regulators alike.

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**'THE POLITICAL INTENT IS CLEAR:  
 TO BRING MORE COMMODITY FIRMS  
 DIRECTLY INTO FINANCIAL REGULATION.'**  
 .....

Many commodity firms with physical operations that are currently engaged in derivative trading but exempt from financial regulation face the spectre of being authorized, and therefore directly regulated, for the first time. This is because MiFID II will sweep away the

'commodity dealer exemption' available under MiFID I whilst at the same time significantly narrowing the current 'ancillary activities' exemption. The political intent is clear: to bring more commodity firms directly into financial regulation.

There are notable implications for a commodities firm becoming MiFID-authorized. In addition to the new organizational requirements and certain direct obligations to comply with, there would be consequential effects under a raft of other EU financial regulations. For example, under EMIR (European Markets Infrastructure Regulation) authorized firms cannot qualify for 'non-financial counterparty' status, regardless of whether they are active in physical commodity markets or not, and thereby lose significant relief from potentially onerous EMIR requirements such as mandatory clearing of over-the-counter (OTC) derivative contracts and wide-ranging risk mitigation techniques.

But it is capital requirements that have commodity firms most worried. CRD IV/

CRR (Capital Requirements Directive IV / Capital Requirements Regulation) is legislation designed to ensure that banks and other financial firms hold financial resources sufficient to protect against losses relevant to the business risks they face. Whilst most specialist commodity firms authorized under MiFID II would benefit from certain exemptions from CRD IV/CRR, related to 'large exposures' and regulatory capital treatment, these exemptions are due to expire at the end of 2017, and in any event these are not blanket exemptions; liquidity rules and 'Pillar 3' requirements (including remuneration code requirements) would still apply, as well as potentially other capital requirements in a firm's home jurisdiction.

The cost implications for individually affected firms could be huge. Whilst the exact impact can't yet be quantified, warning bells are beginning to sound from certain quarters. EFET (the European Federation of Energy Traders) suggested in a press release dated 16 April 2015 ('EFET calls for

action to prevent unintended consequences of financial market regulation for the European energy market in developing MiFID II Level 2 measures') that trading activities in certain energy markets could either be reduced or migrate to non-financial markets in the face of the prospective cost increases. Individual companies have made similar remarks.

Yet these are only possible outcomes, they are not foregone conclusions. Indeed, a more proportionate capital regime may yet emerge. The European Commission has until the end of 2015 to produce a report and a possible legislative proposal regarding capital requirements for firms that trade exclusively in commodity derivatives. There has even been talk in the industry that the expiry of the two key CRR exemptions might be pushed back to 2020. Until this happens though, affected firms will be looking on nervously.

EU trading venues will also be impacted by changes brought about by MiFID II/MiFIR. Whilst these venues will still continue to provide the market with a compelling offering – a central place to manage risk in a transparent and, where relevant, cleared manner – there will also be changes to the current model, a new environment to adapt to. The most notable of these changes is with respect to position limits, which is a new concept for European commodity markets. This will be the focus for the remainder of the article.

For the USA, position limits are not a new concept. The CFTC (Commodity Futures Trading Commission) has for decades directly imposed limits on a core set of agricultural contracts, and also effectively required exchanges to set limits across a broad swathe of other commodity and financial contracts. The origin of position limits in the USA dates back as far as 1936 with

powers to set the limits being granted to the CFTC's predecessor, the CEC (Commodity Exchange Commission), under the Commodity Exchange Act. The CEC first imposed position limits in 1938 on certain grain contracts.

In the case of the EU, however, with a few recent exceptions aside, regulators and exchanges have largely eschewed position limits in commodity derivative markets in favour of a less formalized, though by no means necessarily a less rigorous or less effective, approach. In the UK for example, the body responsible for the oversight and supervision of commodity derivative exchanges, the FCA (Financial Conduct Authority), has required exchanges to employ a 'position management' regime under which positions taken in their markets are scrutinized and, to the extent such positions have the potential to lead to disorderly settlement or be used to effect an abusive strategy, are appropriately managed. For instance, in certain cases positions could be capped or reduced at the direction of an exchange and in accordance with the authority set out in its own rulebook.

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**'IT IS REGULATORS ... THAT WILL DETERMINE THE MAXIMUM ACCEPTABLE "SPECULATIVE" POSITION IN ANY GIVEN COMMODITY DERIVATIVE ...'**

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The new MiFID framework will change the emphasis of this current arrangement. Whilst the new regulations will require exchanges and other trading venues in the EU that list commodity derivatives to operate effective position management controls, this will be overlaid with an all-encompassing position limit regime. This is a significant change. It is regulators across the EU that will determine the maximum acceptable 'speculative' position in any given commodity derivative, not the trading venues. These maximum levels will be hard limits, applying to both the spot

month and 'all other months', which participants will not be permitted to exceed unless they hold a relevant exemption, granted for hedging activity only.

Hedge exemptions will only be granted to 'non-financial firms', effectively defined as firms that do not carry some form of financial market authorization under European legislation. This would therefore preclude commercial firms that carried a MiFID licence, as well as other financial firms, such as banks, from utilizing hedge exemptions. This could be problematic in some cases. It is not yet clear how affected commercial firms may respond to this challenge. For banks in the EU, they will need to assess how OTC commercial client business that is presently hedged with on-exchange derivatives could be affected.

The challenges in transitioning to this new regime are magnified by the scope and ambition shown by MiFID's co-legislators. Position limits will apply to all commodity derivative contracts traded on a trading venue – whether that be, in European jargon, regulated markets (in other words, exchanges), multilateral trading facilities (MTFs), or the as yet unknown pool of participants to be classed as organized trading facilities (OTFs) – as well as derivative contracts trading in the OTC market deemed to be economically equivalent to any of those on-venue contracts.

Implementation risk is therefore high. To move from a regulatory framework which has largely excluded the use of position limits (barring a few recent introductions of exchange-administered delivery and expiry limits), to a place where position limits apply to the vast majority of commodity derivatives in the EU, is a bold move. Regulators face a gargantuan task in accurately setting appropriate limits for the potentially thousands of affected contracts simultaneously, and must therefore

remain open to amending these initial limits in light of practical experience as the case may require.

The scope of the regime will presumably also result in a prosecutorial shift, with national regulators in the EU likely to take a leading role in prosecuting limit breaches. In the normal course of events, generally speaking it is the exchanges that enforce against minor rule infractions, whereas enforcement action taken by national regulators is usually reserved for more high profile and egregious misconduct, such as serious market abuse cases.

Yet this will surely have to change, at least in certain cases. This is because position limits will apply to on-venue contracts and economically equivalent OTC contracts. Trading venues will simply not have sight of positions in OTC contracts, and in such cases compliance with limits will have to be assessed by national regulators with appropriate access to position data, potentially across different EU jurisdictions. The picture could be further complicated if one position limit was to be applied to more than one on-venue contract, as the legislation seems to envisage in certain cases. The quality of information flows between the exchanges and national regulators, and between national regulators themselves, is therefore going to be critical if policing and enforcement of position limits is to be completely effective.

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**‘CLEARING FIRMS THAT OPERATE ON A PAN-EUROPEAN LEVEL ARE LIKELY TO HAVE TO BEAR SIGNIFICANT EXTRA COSTS AND INVESTMENT.’**  
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There are also system build implications and cost outlays to consider. For market participants, their systems must be sophisticated enough to assess compliance with limits across

potentially thousands of contracts in real time, discounting hedging activity where relevant and aggregating positions across contracts and group entities in appropriate cases. Position reporting capabilities will also have to be enhanced. Whilst many participants already report positions to certain exchanges, the MiFID position reporting regime is far more extensive, requiring reports to be sent to all venues where open commodity derivative positions are held, and for some firms reports must also be sent directly to national regulators. Clearing firms that operate on a pan-European level are likely to have to bear significant extra costs and investment. It is not clear whether such costs could be easily passed onto each client in an environment where the cost of clearing is already rising significantly. Trading venues and regulators must also have adequate systems enabling them to receive and make use of position data in MiFID-compliant formats.

In addition to the overarching requirements set out directly in the MiFID II/MiFIR legislation, ESMA (the European Securities and Markets Authority) has recently published the detailed rules required for implementation in the form of draft Regulatory Technical Standards (RTS). Whilst the RTS remain subject to the review and approval of the EU Commission, Council, and Parliament, they do give a very good indication as to how some of the mechanics of the regime will work in practice. There are a number of features to ESMA's proposed regime that are worthy of comment.

First, ESMA's methodology which national regulators will use to calculate position limit levels on commodity derivative contracts in their jurisdiction is, broadly speaking, a sensible framework. ESMA's methodology addresses the risk of abusive squeezes occurring as derivative

contracts approach expiry, by capping spot month derivative positions to a proportion of overall physical market supply (except for contracts where this isn't a relevant concept, such as weather, where position will be capped as a proportion of open interest). However, the usefulness of an 'all other months' limit is less obvious, as the risk of an abusive squeeze occurring outside the spot month is far less likely to occur. Nonetheless, such limits are required by the legislation. ESMA's proposal to cap the 'all other months' positions to a proportion of overall market liquidity, subject to a *de minimis* threshold to ensure limits do not artificially stymie the growth of new and illiquid contracts, is therefore probably the best way of calibrating the framework given the constraints of the legislation.

There is also flexibility built into the methodology – a sensible step when limits will apply to so many and so varied a set of contracts. Having first calculated a baseline limit of 25 per cent of either deliverable supply or open interest, regulators will have the power to amend that limit, either upwards to a maximum of 35 per cent or downwards to a minimum of 5 per cent, after assessing a range of factors relevant to that specific contract.

Yet the benefits afforded by this flexibility come with a caveat: regulatory discretion in the setting of the limits needs to be wielded with due skill, care, and caution. Setting limits too low could unnecessarily constrain legitimate trading activity – clearly a negative outcome. Yet even where higher limits are established, circumspection will still be needed to ensure markets remain orderly and free from abusive practices; position limits should never negate continual and effective use of position management powers by exchanges and other similar venues.



Second, parts of ESMA's commentary on the factors that could drive the position limit upwards or downwards from the baseline level are data driven, and trading venues should therefore be braced for multiple data and information requests. This would be particularly welcome in respect of assessing the level of deliverable supply relevant to a contract, with certain trading venues holding significant expertise in this area. Whilst the draft RTS do not appear to oblige national regulators to consult trading venues for deliverable supply estimates, ESMA's Final Report on the draft RTS indicates this is certainly contemplated and it is something therefore we believe is likely to happen in practice. However, in the interests of transparency and integrity, any deliverable supply estimates provided by trading venues to regulators should be as a general principle a matter of public record, as is the case in the USA, except perhaps in cases where proprietary data of a third party is used.

Third, it would appear that spot month position limits will apply to a contract for as long as it is deemed to be 'the spot month'. This is different to how the regime has typically worked in US markets, where the spot month limit only applies for a certain period, such as the last three business days prior to expiry. Under the EU regime though, ESMA has defined the spot month contract as 'the next contract in that commodity derivative to mature'. Absent any clarification it would appear the spot month limit will apply the moment a contract becomes designated as 'the spot month' and will remain in force until the contract expires. Depending on where specific position limit levels are set by national regulators this could prove to be significant and it becomes more notable for contracts with less frequent listings – for contracts with

longer-dated expiry structures, such as quarterly expiries that are common to certain agricultural contracts, the spot month limit would apply to the same 'spot month' contract for three months.

Fourth, ESMA has drawn the definition of economically equivalent OTC (EEOTC) contracts narrowly. OTC contracts will be caught by limits if they have 'identical contract specifications and terms and conditions' to on-venue contracts (though the definition specifically excludes 'post-trade risk management arrangements' as a necessary factor). A related recital also requires an OTC contract to have the 'same underlying commodity that is deliverable at the same location' as an on-venue contract. ESMA's intention appears to be to reduce the complexity of applying position limits to a diverse and somewhat unknown set of contracts in the OTC market. Yet it remains to be seen as to whether this will be the case in practice, and much will hang on how regulators and the market will interpret the term 'identical'. For example, OTC contracts are typically governed by agreements that contain terms and conditions that do not appear in the terms and conditions for trading in on-venue contracts – will that difference mean that ESMA's OTC definition effectively becomes an empty set?

Assuming at least some OTC contracts could be found to be equivalent to on-venue contracts, the question then arises as to whether the market could establish with certainty what an EEOTC contract is – a fundamental prerequisite for participants to adhere to position limit levels and for regulators to validate firms are compliant. It would appear that a definitive public list would be the optimum way of achieving this necessary certainty. Participants could be asked to notify regulators of the OTC contracts they deem to be economically equivalent to on-venue

contracts. Subject to assessment and approval by regulators, these contracts would then be added to a public list. This would be a partial solution, but other complexities also need clarifying, such as whether an OTC contract could be economically equivalent to more than one on-venue contract, and how OTC contracts with pricing structures that don't neatly map to on-venue expiry and pricing structures should be treated. Such questions may be moot, however, if the currently proposed narrow EEOTC definition is retained and passed into European law.

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**'ESMA'S NARROW DEFINITION OF THE "SAME" COMMODITY DERIVATIVE MEANS THAT IN MOST CASES EACH CONTRACT ... WILL BE GOVERNED BY A SEPARATE LIMIT.'**  
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Fifth, ESMA's narrow definition of the 'same' commodity derivative means that in most cases each contract in the EU will be governed by a separate limit. MiFID II requires that where the 'same' commodity derivative is traded in significant volumes on trading venues in more than one EU Member State, those contracts should share the same limit. However, ESMA's definition of 'same' in this context is very narrow – based on the EEOTC definition previously referenced and a requirement that the two contracts 'form a single fungible pool of open interest'. The latter clause appears to mean that one contract may be closed out by trading a second contract. Very few, if any, contracts traded across multiple venues are, in our view, likely to meet this requirement. The net effect is that under the current market structure it is highly unlikely contracts traded on different venues will be governed by the same limit. There is therefore an apparent disconnect between the policy intent of the co-legislators and ESMA's proposal on this point.



But what of cases where two or more of the 'same' contracts are traded across multiple venues in a *single* EU Member State? Whilst the MiFID II legislation is silent on this point, it would appear ESMA's proposed rules would require positions in such contracts to be aggregated too. However, again, the narrowness of the definition of 'same' would seem to preclude that as a realistic possibility. It would also appear that where similar (but not the same) contracts are traded on the same venue, such as options and related futures, or 'mini-sized' and related 'main' contracts, there is arguably no requirement to aggregate positions in such contracts (although trading venues could still aggregate positions in such contracts for their own monitoring and surveillance purposes).

The narrowness of the definition of 'same' commodity derivative could pose headaches for regulators when determining appropriate limit sizes. This resonates most in markets that are fragmented, and European power and gas markets are a good case in point. There are multiple exchanges and broker platforms active in these markets in Europe with substantially similar contracts offerings, all of which will be caught by the EU-wide position limits regime. Whilst market participants may see many of these gas and power contracts as substantially similar in economic terms, or even identical in certain cases, they are unlikely to be classed as the 'same' for position limit purposes.

A potential problem could therefore arise as to how limits will be set for each of these similar contracts. Let's assume that national regulators determine the appropriate spot month limit in a European gas contract should be set at 25 per cent of deliverable supply. Will each contract on separate venues be allocated a limit of 25 per cent of deliverable supply? Or will each of those venues proportionally share

of an overall limit, such as 2.5 per cent of deliverable supply shared equally amongst ten venues? Neither scenario provides an optimal outcome.

Sixth, the proposals on aggregating positions across a group are not clear. Barring a carve-out for qualifying investment managers, the regime requires a 'parent undertaking' to aggregate its own positions with each of its 'subsidiary undertaking' firms. The definition as to what constitutes parent and subsidiary undertakings is found in the Consolidated Accounts Directive (2013/34/EU) – the relationship being triggered in scenarios where a parent holds a majority of the voting rights of a subsidiary, or breaches one of a number of tests related to control over the governance framework of a subsidiary (such as powers to appoint or remove Board members and management).

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**'... THE AGGREGATION STANDARD SHOULD ADDRESS BOTH THE CORPORATE RELATIONSHIP BETWEEN ENTITIES AND TRADING CONTROL.'**  
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ESMA specifically states in its Final Report that the aggregation standard should address both the corporate relationship between entities and trading control. However, the Accounting Directive tests are not designed to measure, and therefore completely ignore, whether or not one group entity exercises *trading control* over the derivative positions of another group entity. Consequently, it could be possible in certain cases that an entity is required to aggregate its derivative positions with those of another entity within the same group over which it has no direct knowledge or control. This could obviously be problematic from a compliance standpoint, as how would two sister companies that are deliberately separated by location and firewalls, for example, know whether their combined positions were in

compliance with a given limit? It is also not clear whether aggregation merely occurs from the topmost position holder downwards (as seems to have been ESMA's intention from previous consultations) or whether aggregation is also meant to occur 'upwards' through a corporate structure. Further guidance from ESMA will be needed to ensure a clear and consistent interpretation on the standards for aggregation.

Seventh, the workability of the process for obtaining a hedge exemption regime is questionable. Leaving aside the implications of banks and other financial institutions being ineligible for hedge exemptions (a MiFID legislative issue that ESMA cannot fix), ESMA has proposed that national regulators be permitted 21 days to consider each hedge exemption request – an impossible wait if business risks require hedging immediately – with no ability to file exemptions *ex post*, even in limited necessary cases. Commercial firms could therefore face difficult decisions as to how to manage specific price risk of a physical commodity when faced with immediate hedging requirements, which could include seeking access to markets without such constraints or where hedge exemptions may be more easily obtained.

It also appears ESMA's proposals could require firms to apply to national regulators on a position-by-position basis, as the draft RTS seems to require relevant firms to demonstrate how a *position* reduces risk directly relating to their commercial activity in order to obtain a hedge exemption. Such an approach could see regulators swamped with requests and aggravate the inefficiency of the strict 21 calendar day process. A more workable approach would be to allow national regulators to grant hedge exemptions based on the likely or possible commercial activity of a firm over a certain forward looking duration,



such as a year, rather than requiring exemption requests to be filed on a per position basis. Although this approach may ultimately be adopted, it does not appear to be expressly contemplated in the draft RTS. It would also make sense to permit the ability for firms to be able to file for positions limits on an *ex post* basis in cases where circumstances require risks to be hedged immediately.

Eighth, and lastly, MiFID II does not explicitly provide for a phased implementation. The attendant risk is obvious – the market may not have enough time to adapt to the new regime or to trade out of larger positions in an orderly manner if required. Short of a legislative amendment that would provide an adequate phase-in, it will be incumbent upon the national regulators to publish their proposed and approved position limits as expeditiously as possible so as to provide maximum notice to the market of the forthcoming changes.

Setting aside the specific details of the EU regime, there is also the international aspect to consider and in particular it will be important to understand how the EU position limits framework will dovetail with the proposed limits regime in the USA. It is the stated intention of ESMA not to apply limits to third country venue contracts, which will prevent any jurisdictional overlap from an EU

scoping perspective at least. However, a comprehensive comparison between the details of the proposed EU and US regimes is at this stage difficult, not least because a number of factors relevant to the proposed US regime are in flux, and the actual position limits levels for EU markets will not be proposed by national regulators until some point in 2016.

However, unlike in the USA, where an established position limit regime already exists, a mindset change in Europe will be required to adapt to the new order. Changes on this scale will likely affect most firms, and certainly those that typically carry positions of any reasonable size. Traders will likely have to carefully manage positions to remain in compliance with limits, and firms' systems and monitoring capabilities will have to be advanced enough to ensure that remains the case. The picture could be further complicated where a firm is part of a large group. Certain firms must also become familiar with new processes, such as applying for hedge exemptions or aggregating group positions, and build those requirements into trading and hedging strategies. Firms must begin to prepare for these changes now, but there remains a high degree of uncertainty on points of interpretation and exactly how the regime will work in practice. Regulators would do well to bring clarity to the points we raise

in this paper, and firms and trading venues should remain fully engaged in these issues.

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**'THE PLETHORA OF REGULATIONS ...  
 COULD HAVE A PROFOUND IMPACT ON  
 THOSE MARKETS.'**  
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Yet position limits are just one aspect of the wider changes affecting EU commodity derivative markets. The apparent aims of the new regulations are unquestionably noble – to uphold market integrity and to safeguard the efficient functioning of those markets. But the plethora of regulations, either recently implemented or those soon to come into effect, could have a profound impact on those markets. Impending MiFID authorization and attendant capital requirements will surely influence, and in some case drive, affected firms' strategic business decisions. Other fundamental changes to market conventions are afoot, such as those brought about by the new MiFID transparency regime. Firms of every ilk will be affected and market structures could change. The final shape of these regulations and how the industry responds will define the commodity trading landscape in the EU for the next 5 to 10 years.

*The views expressed herein are solely those of the authors and do not necessarily represent the views of CME Group.*



## Risks to the proven efficacy of energy markets

Ian Taylor

We are entering uncharted territory for the energy markets. The scope and depth of regulation which has recently been, or is in the process of being, implemented, across both the USA and the EU is unprecedented and questions remain regarding its impact on both

energy markets and the companies which use them.

Every day the world's commodity markets cause the raw materials, on which the global economy depends, to move to where they are needed. They

do this remarkably effectively, driven by the underlying forces of demand and supply. As the recent halving in the price of oil has shown, the markets can deal with significant shifts in price, with no impact on market orderliness or liquidity. Thus their primary purpose is

to act as a price discovery mechanism for materials that are the building blocks of economic activity, unlike many other traded markets whose primary purpose is to raise or increase capital.

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**‘THE FACT THAT SOME INSTITUTIONS WHICH ARE ACTIVE IN THE CAPITAL MARKETS ARE ALSO ACTIVE IN COMMODITY MARKETS, DOES NOT MAKE THE MARKETS ALIKE.’**

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The capital markets are also fundamental to economic activity but they are different; they serve a different purpose, function in a different way, and pose different risks. The fact that some institutions which are active in the capital markets are also active in commodity markets, does not make the markets alike. Hence the need for policy makers and regulators to ensure that their proposed regulations do not have unintended consequences, particularly for the end consumer.

The focus of both policy makers and regulators on improving markets is understandable in the wake of the financial crisis, the call on taxpayer funds, and subsequent investigations into market manipulation. The concern is that by treating commodity markets from an investment market perspective, with respect to regulation, the risk exists that their efficacy is eroded, to the cost of both the real economy and the end consumer.

This will result in two unfortunate outcomes. The first is that the market will become less efficient and more volatile, with the consequence that costs to end consumers will rise. The second is that activity, and in some cases entire markets, will migrate to other jurisdictions, most notably the fast growing markets in Asia.

Europe’s place at the heart of world oil markets is largely accidental. North

Sea Oil, market openness, the rise of the price-reporting agencies, and the establishment of the International Petroleum Exchange (today’s Intercontinental Exchange or ICE) in the 1980s, all contributed to European benchmarks and pricing being those used in contracts globally today.

But there has been a significant shift, both in terms of production and, more importantly, consumption. At its peak, the North Sea accounted for just under 9 per cent of production globally, today it is 3 per cent and, in the current price environment, this is likely to fall further. Similarly, in 1980 Europe accounted for 24 per cent of global consumption, compared with 15 per cent today (the USA has always been the largest consumer with 28 per cent in the 1980s and 20 per cent today). In contrast, as you would expect, Asia’s increase in both absolute terms and share of global consumption is marked: from 10.5 million barrels a day to 30.4 million barrels a day (17 per cent to 33 per cent) over the same period. Today, China’s consumption alone is equivalent to the whole of Asia’s consumption in 1980. If India’s and China’s consumption patterns evolve to emulate Europe’s relatively low levels of consumption, they will account for 18 per cent by 2020.

In this context, it is unsurprising that challengers to Europe’s energy derivative markets and pricing mechanisms are already arising. Policies and regulations which diminish the competitiveness of Europe’s markets will only strengthen the position of competitors and drive pricing activity to other regions. The losers will not only be Europe’s consumers and industries, who are likely to experience relatively higher prices, but the markets themselves. All participants have benefited from markets which function efficiently within a stable, respected, and appropriate regulatory framework, as has generally

been the case to date. That is, one which takes account of the unique characteristics of the energy markets.

To consider our concerns more specifically, at present two areas come to mind; the implementation of Markets in Financial Instruments Directive (MiFID II) and the issue of ‘systemic risk’.

### **Concerns relating to implementation of MiFID II**

With regard to MiFID II – which we should not forget is legislation originally conceived for the protection of investors, not to facilitate an orderly market in commodities – ESMA (the European Securities Market Authority) has recently published its proposed Regulatory Technical Standards (RTS). Whilst we appreciate that ESMA has sought an open and active dialogue with market participants throughout the process, areas of concern remain.

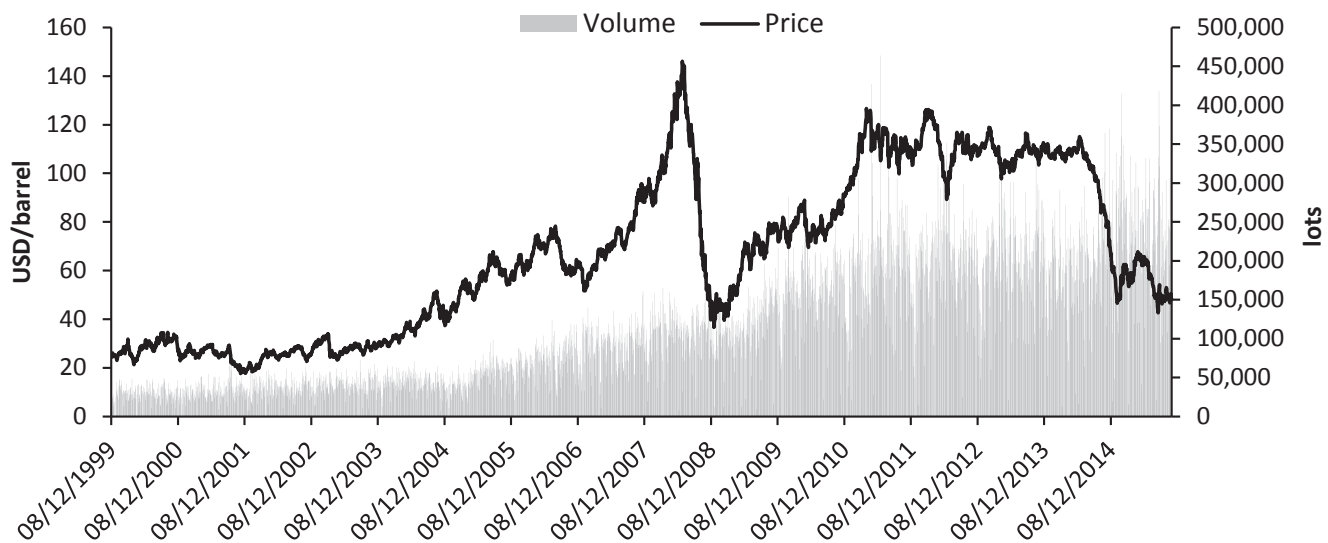
ESMA has recognized that companies which are not investment businesses are nonetheless at risk of being captured by the regulation – which could result in say, a utility company being regulated as if it were an investment firm. To try and address this, current proposals seek to match hedging activity through financial instruments with physical activity. Unfortunately this is a poor proxy and, as industry bodies have already proposed, it would be both simpler and more effective to look at the allocation of accounting capital to determine the company’s core business.

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**‘INVESTMENT FIRMS INVEST TO GENERATE A RETURN, COMMODITY TRADERS MOVE PHYSICAL COMMODITIES ...’**

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Having spent my entire career in the physical markets, the differences between our business and that of an



**Oil price and the volume of contracts traded**

investment firm seem clear. Investment firms invest to generate a return, commodity traders move physical commodities – hence our obsession with logistical details and real consumer demand, country by country and fuel by fuel. Some of the tools we use may be the same, but that does not make the businesses the same; if hydrocarbons became obsolete overnight, most energy trading operations would no longer exist, whereas investment firms would simply find another asset class to invest in.

Similarly, position limit rules must be set in such a way as to reflect the practicalities of each market – practicalities which will differ from market to market, depending as much on the constraints of the underlying physical market as the financial markets. Here also there is a real risk that rules intended to promote market integrity result instead in a distorted, illiquid market, which is of limited use to end-users.

The recent collapse in the price of oil has demonstrated how effectively commodity markets have responded to the underlying realities of demand and supply, as well as how capably they can handle significant price volatility,

with no impact on liquidity, as the chart 'Oil price and volumes of contracts traded' shows. It has also served to demonstrate how conservatively commodity trade operations manage their risk exposure – without careful hedging, many market participants would have suffered significant losses.

#### **Commodity traders don't pose a 'systemic risk'**

In this context, the resurgence of questions from some quarters regarding the issue of whether physical trading operations should be regarded as a 'systemic risk' (akin to that created by the banking sector) is clearly misguided.

The rationale as to why commodity traders do not pose a systemic risk has been comprehensively articulated by Professor Pirrong of Houston University on a number of occasions. The funding model of commodity trading businesses – with long-term funding and short-term, readily marketable liabilities – is the reverse of that of the banks and some other financial institutions. The position has been further strengthened since the introduction of mandatory clearing

after 2008, meaning that short-term uncollateralized exposure is very limited and the likelihood of large, unfunded exposures forcing a sudden collapse and systemic failure is highly unlikely. This is not to say that trading houses will not fail. They will, and the consequences for employees and equity holders could be tragic, but their unfunded exposures to other market participants will not be sufficient to engender a domino effect.

This begs the question of whether commodity markets can experience 'systemic failure' in the same way that credit markets seized up in 2008. There are multiple participants in energy markets – most of which are not significantly interlinked and all of which respond to the underlying economic drivers of physical demand and supply. So long as there is confidence in the demand for the underlying commodity, and the funds to facilitate trade, the market will continue to trade; the process of transferring ownership of a commodity is well established and relatively simple, certainly much simpler than with financial instruments. Hence the demise of any participant will simply be seen by its competitors as a commercial opportunity.



### Importance of maintaining robust commodity markets

The world's major commodity markets are well established and robust. They have continued to function effectively even in the face of swings in price and huge shifts in demand from the OECD to the developing world, most notably Asia. Bubbles and temporarily inflated

prices are as much a part of commodity markets as 'irrational exuberance' is a human weakness, but eventually, as recent months have shown, the fundamentals of supply and demand take over. As I began by saying, commodity markets exist to continuously facilitate the movement of goods around the world. This is their primary and essential purpose and it is imperative that rules and

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**'IT IS IMPERATIVE THAT RULES AND REGULATIONS ARE DESIGNED TO PROTECT THE INTERESTS OF THE REAL ECONOMY AND CONSUMERS.'**  
 .....

regulations are designed to protect the interests of the real economy and consumers by enhancing this function, above all others. Otherwise Europe will be the poorer.



## Are regulators right to worry about the oil benchmarks?

Peter Stewart

The three most widely used crude oil benchmarks are North Sea Brent, West Texas Intermediate (WTI) from the USA, and Oman crude from the Middle East. As is well known, the bulk of the 92 million barrels of crude oil sold each day is priced based on published assessments or daily averages of deals done in these three grades of oil, known as benchmarks. The assessed value of physical or 'dated' Brent published by Platts, a leading price-reporting agency (PRA), is the most widely used benchmark. Billions of dollars worth of oil and significant volumes of gas and LNG change hands each day based on Platts' dated Brent assessment. Other benchmarks published by companies such as Petroleum Argus and ICIS are also used by the industry.

The Brent market has evolved over the years and it is now one of the most complex of commodity markets. From experience, it takes one full day on a training course to explain comprehensively from scratch how Platts makes its daily assessment of dated Brent. It is usually the most difficult day of such a course. People from outside the oil industry generally expect that oil is sold at a fixed price in dollars per barrel, which is how they

hear the price of oil on the television. They are baffled and often astonished when they find out the reality.

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**'ASSESSING THE VALUE OF BRENT CRUDE OIL IS ANYTHING BUT SIMPLE.'**  
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The scientist Isaac Newton said: 'Truth is ever to be found in simplicity, and not in the multiplicity and confusion of things.' Assessing the value of Brent crude oil is anything but simple. Brent crude oil is currently most frequently sold based on a value that Platts will in the future publish for the lowest in price of four not very similar grades of crude oils (Brent, Forties, Oseberg, and Ekofisk, also referred to as BFOE) on the days around or shortly after the cargo is loaded. That is usually 2–4 weeks after the deal between a seller and a buyer is concluded. The value that Platts publishes on the bill of lading date is itself not based on a transaction that is concluded at a fixed price. The calculation that Platts makes each day of the fixed price value for each of the four grades is usually derived from at least two, and arguably three, separate financial instruments: the Brent forward price and the Contract for Difference between the physical cargo and forward Brent. (The

forward Brent price is itself derived from the Brent futures price and the Exchange for Physical differential). Moreover the values are not the result of a survey or an average of deals; buyers and sellers meet and transact their deals on the Platts screens – in what has become known as the Platts 'window' – bids and offers are posted and may or may not result in actual transactions, and only the market price at a particular moment in time (4:30 London time) is reflected in the daily assessment. These assessments and the real-time flow of bids and offers can be seen by anyone who wants to pay a hefty subscription fee. Although Brent is generally regarded as the market with the most complex structure, similar mechanisms of varying degrees of complexity are used in assessing the value of other benchmarks.

Platts' methodology and those of its competitors – Petroleum Argus, ICIS, and others – have evolved over time, and the assessment systems have been adapted as the market itself has changed. So the fact that the assessment methodologies used are sometimes convoluted cannot be laid solely at the doors of the PRAs (Platts took a more active role in defining the



standards for trades that it will consider in its assessment when it set up the BFOE system, and with the subsequent introduction of quality escalators and alternative delivery procedures). Nevertheless, it seems evident that there has been a growing lack of trust between the regulatory community, the price-reporting agencies, and the trading community in recent years, particularly in Europe. The IOSCO (International Organization of Securities Commissions) principles were developed to ensure best practices in assessments were followed; but some groups within the European Union now want to go far beyond these principles, in a way that many in the industry believe would add to the cost of transactions and would ultimately hurt the consumer. Whether that will happen depends on decisions that will be taken in the coming weeks and months.

Rather than take sides in this debate, this analysis seeks to characterize the agendas that motivate the three groups (traders, regulators, and PRAs); it then examines the evolution of the benchmarks; and then tentatively suggests some ways that regulators, the industry, and the PRAs might find common ground in which trade continues, while not being perceived as a threat by regulators.

### **The benchmark system, transparency and liquidity**

For a *trader*, the virtue of the benchmark system is that it allows market participants to easily see the relative value of different grades of oil. Using a single reference grade, and

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**‘FOR A *TRADER*, THE VIRTUE OF THE BENCHMARK SYSTEM IS THAT IT ALLOWS MARKET PARTICIPANTS TO EASILY SEE THE RELATIVE VALUE OF DIFFERENT GRADES OF OIL.’**  
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expressing the value of the several hundred different grades of oil that are actively traded as a differential to it, allows market participants to discern quality trends more readily, as well as the time structure of the market. There is more ‘information’ in the prices and spreads than if everything traded at a fixed price, like electrical goods in a department store. Traders can make more money in a system that is non-transparent, so their heyday was arguably in the highly secretive early days of oil trading when the likes of Marc Rich dominated the image of an oil trader in the public’s imagination. But as the market became more transparent, traders needed liquidity more than anything else; as arbitrage becomes more efficient, margins become increasingly thin, so the frequency and size of transaction – the liquidity of the market – speeds up. Traders see a valuable role for their trading activities in ironing out temporary imbalances of supply and demand. This involves risk, so it is natural that they should seek to make money from these activities.

.....  
**‘WHAT [THE *PUBLIC AND THE REGULATOR*] WANT IS A CLEAR EXPLANATION OF THE FIXED PRICE OF THE COMMODITY.’**  
 .....

The *public and the regulator* have zero interest in the minutiae of details that are the lifeblood of traders; they do not care about small or even big changes in grade spreads, backwardation and contango, arbitrage openings, location spreads etc. What they want is a clear explanation of the fixed price of the commodity, because business and the public are exposed to the retail price of the fuels derived from crude oil, and it is their interests that regulators typically seek to protect. High liquidity may in itself be suspicious; the gut feeling is that if traders are trading so much, they must be making pots of money. Despite that, regulators like replicability

and so mathematical systems that give predictable results, such as taking averages of large numbers of trades, give them a sense of comfort. As for transparency, the lack of a reliable fixed price number that represents the ‘real’ value of physical oil is a huge concern. Regulators may look askance at the pea soup of spreads and ratios that allows traders to trade so creatively and which makes the market so efficient. They may well ask, is all of this just smoke and mirrors, a way of obfuscating the fixed price of the commodity?

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**‘FOR THE *PRICE-REPORTING AGENCY*, THE AGENDA IS TO REPORT THE TRUTH AS ACCURATELY AND TRANSPARENTLY AS POSSIBLE.’**  
 .....

For the *price-reporting agency*, the agenda is to report the truth as accurately and transparently as possible. The PRA has to make an assessment each day, whether or not the market is transparent or liquid. The badge of honour of the PRA is to publish more accurate information. From my experience, the PRAs do not care much about liquidity. Platts was certainly suspicious of replicable systems, such as averages based on large numbers of deals, as these are easier to game. But the PRAs care a lot about transparency and the accuracy of their assessments. For example, Platts took a decision in the early 2000s to start publishing the names of companies involved in physical oil transactions; it was a very unpopular decision with the industry who for decades had reported deals to Platts on the assumption of anonymity along the lines of: ‘Brent reported sold at Sep minus 20 cts, ARA trader to US major’. Likewise, the ‘window’ system was unpopular when it was first put in place in the European products market; traders were vociferous in denouncing it.

Ironically, while Platts put more and more effort into opening up Pandora's Box by making the physical market fully transparent, regulators received mixed messages – even from some of the large oil companies – about whether the assessment system could be trusted.

### Historical evolution of benchmarks

When the benchmark system was set up in the mid 1980s, the futures markets were still in their infancy, there was no developed swaps market, and the physical market was shrouded in secrecy. The evolution of the benchmarks, including Brent, is described in Bassam Fattouh's study 'An Anatomy of the Crude Oil Pricing System' (Oxford Institute for Energy Studies, WPM40, January 2011). The price-reporting agencies at the time were among the only sources of price discovery, so it made sense to use their daily assessments of the key marker crude grades as a barometer of overall market value.

Platts' daily assessments for individual crude oils were already widely used in term contracts and in settlement of spot transactions, particularly in the USA. Although a relative latecomer to international crude oil assessment, Platts' forward assessments of Oman and Dubai, Brent, ANS (Alaskan North Slope), and WTI were quickly incorporated in term contracts with OPEC members.

Platts published daily assessments of the fixed price value of the oil, which didn't involve any complex sums because, at the time, crude oil was generally traded at a fixed price. As the market evolved, and risk management structures became more sophisticated, the market structures also became more complex. Whereas in the past traders had tended to tie contracts to Platts' assessments of individual crude oil grades, the benchmark system

focused liquidity on the key benchmark grades. Forward contracts for Dubai and Brent became more liquid, frequently with 60–80 full cargoes of Brent changing hands in so-called 'daisy chains' in what at the time was the 15-day Brent market. The liquidity on futures markets, although initially lagging that of the 15-day market, saw an even more impressive growth trajectory. The NYMEX light sweet crude contract was set up in 1983 and the IPE's Brent contract followed in 1988; both became dominant markers for the outright market value by the end of the decade. The New York Mercantile Exchange (NYMEX) is now part of Chicago Mercantile Exchange (CME); and the International Petroleum Exchange (IPE) is now owned by the Intercontinental Exchange (ICE).

This evolution resulted in a dichotomy that characterizes the benchmarks today, and still troubles regulators. While pricing remains tied to the assessments published by the reporting agencies, the outright price transparency through the day is from the futures screen. Because the market's trading structures evolved before the futures markets took off, the legacy pricing mechanisms did not adjust to the new reality. Even in the early 1990s, many crude oil traders (fantastical as it may now seem) believed that the futures markets were a passing fad.

Physical Brent deals at this time were often concluded at differentials to the 15-day price, so a dated cargo would change hands at (for example) 'January 15-day Brent less 20 cts/barrel'. As more pricing converged on the Platts physical Brent assessment, so risk management instruments evolved that bridged the gap between the futures and the physical, and the forward and the physical. The Dated to Frontline Swap allowed traders to fix the spread between the first month future and Platts dated Brent assessment, while

the Brent weekly CFDs allowed the gap between the forward 15-day (or later 21-day and 25-day) market and the physical price. These instruments allowed traders over time to sell physical cargoes of oil on a Dated Brent-related price plus a differential. Using risk management instruments, traders could lock in a fixed price on the day a trade was concluded, despite the deal being invoiced based on the Platts average Dated Brent price on/around bill of lading plus the differential.

Indeed, there was no reason at all why Dated Brent should not itself trade at a differential to its own value in this system. Rather than physical Brent trading at a fixed price, it traded against Platts dated Brent, which itself was set by the Brent future, plus an EFP (exchange for physical) differential, plus a CFD (contract for difference) differential. The Brent future, while very liquid, did not result in physical delivery, except by the bilateral mechanism of the EFP. So the value of the most influential physical benchmark moved from being a negotiated fixed price, to an assessed number determined by the value of a suite of financial instruments which did not involve physical delivery, plus a negotiated differential. For oil traders, the system worked well. It was highly flexible, it allowed the price to be set when the cargo loaded, and it preserved the time gradient of the market and the quality differentials between crude oils. But to regulators, it was 'anything but transparent'.

A series of changes followed which established Platts as a determiner of market structure, rather than simply an observer of the market. The evolution of Dated Brent into dated BFO and then dated BFOE is well known; subsequently, the Forties assessment was subject to a quality penalty based on its sulphur; and more recently prices were adjusted to avoid an options



value for grades such as Oseberg and Ekofisk from affecting the Brent price. No doubt further changes will be made as markets evolve. A reporting agency such as Platts probably sees this as sensible due diligence in the quest for an ever more precise assessment, a fine tuning of the basic steps put in place through the BFOE mechanism to avoid the manipulation of assessments. To a regulator, the mechanism may well look like an evolutionary accident, similar to those birds whose tail gets so long that they become incapable of movement; a case of the survival of the weird, rather than the survival of the fit.

### Moving forward

The irony of the benchmark system and the use of published assessments is that it was supposed to simplify and clarify the market by making its structure more transparent. In fact it has resulted in a system in which the value of 'real oil' is discovered through a set of spreads. The fixed price is that on the futures exchange, a contract which converges on settlement with the second forward 'cash' BFOE month. Although cash BFOE trades in the 'window' at a fixed price, this is for relatively brief periods during the assessment process. Trading volumes have anyway declined as the swaps market has grown.

The futures price is clearly not the physical price; but because it can be seen on a screen through the day, is readily available without a subscription fee, and is a fixed price rather than a price set through a differential, it is widely quoted in the media as the 'real' price of oil. Conversely, knowledge of the physical price is only available for a hefty subscription fee; it is increasingly an abstraction that is dependent on a methodology, and is usually set as a differential to another instrument;

and finally the fixed price assessment cannot be seen through the day in real time, but only after the window is closed and the price assessors have done their arcane and sometimes complex calculations.

To those who have grown up in the quotes-related system, it often seems inconceivable that things could be done differently. The reality is that there are many ways in which the market could restructure itself to give more robust price discovery, as well as being simpler and more intuitive to comprehend.

A switch to fixed price trading is one possibility; it happened in the US market in the days after 9/11 when the NYMEX was shut. Other oil markets trade at fixed prices; hedging is still possible through swaps that are settled against values published by the PRAs. Deals could also be done at Brent futures-related prices in much the same way as in the good old days, when physical Brent was traded at a differential to the 15-day forward. There is also no reason why market participants should put all their eggs in the Brent basket price; a trend towards more diverse regional benchmarks is arguably already underway.

### REGULATORS SHOULD RESIST THE URGE TO TELEPORT FINANCIAL MARKET SOLUTIONS TO A COMMODITY MARKET ...

Meanwhile, regulators should listen to the market. Financial market regulators were alarmed at the manipulation of the LIBOR benchmark. Even before that hot potato exploded, the PRAs knew of the weaknesses of such subjective mechanisms, and had developed systems to make their own oil price assessments more objective and robust than the weak

systems that were used in financial markets. Regulators should resist the urge to teleport financial market solutions to a commodity market that is fundamentally different in its operation.

The market structure is not something that can be decided by a committee. It is the job of each member of the trading community to decide individually. A regulator cannot make such decisions; nor can a price-reporting agency. But it is important that there is a forum for discussion among the three groups, because better decisions will result from a fuller understanding of the priorities of each. The current situation in which (apparently) the regulators trust neither the trading community nor price-reporting agencies is undesirable. European regulators appear intent on rushing through new rules no matter what they are told by professionals with years of experience in the business.

Unfortunately, this provokes what is often a lightly concealed disdain among the industry for the regulatory effort, because the regulator is perceived to be anti-market and to not understand how markets work. Even when the three groups – traders, regulators, and PRAs – use the same words, they do not necessarily have a common language, because the words have different meanings for each of them. Words such as 'transparency' are brandished – like light sabres in a Star Wars battle – by all three of the groups trying to claim the moral high ground, but with no attempt to sit down and really understand what the concept of transparency means for each of the individual entities.

What is needed is not just a three-way discussion between the industry, regulators, and PRAs, but a genuine attempt to mutually understand the others' language.





## Regulation and the price-reporters

Neil Fleming

The history of the relationship between regulators and commodities markets has been characterized by three questionable assumptions: that a problem exists *at all* with the measurement of value in energy and commodities; that automated measurement systems are less vulnerable to manipulation than people; and that a static measurement system can guard against potential future manipulation.

Traumatized by the example of LIBOR and some forex markets, regulators began four years with the additional 'Medieval Witchcraft Trial' assumption that all benchmarks are alike. To quote from the EU Parliament's draft text from earlier in 2015 for regulating markets:

'Serious cases of manipulation of interest rate benchmarks such as LIBOR, EURIBOR, as well as foreign exchange benchmarks, causing considerable losses to consumers and investors and further shattering the confidence of citizens in the financial sector, **as well as allegations that energy, oil and foreign exchange benchmarks have been manipulated, demonstrate** that benchmarks can be subject to conflicts of interest and have discretionary and weak governance regimes that are vulnerable to manipulation.' (bolding added)

It takes only a moment's thought to appreciate that an allegation cannot demonstrate anything, unless it is proven. And to say that a benchmark

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**'TO SAY THAT A BENCHMARK "CAN BE SUBJECT TO CONFLICTS OF INTEREST" DOES NOT MAKE IT SO IN ALL CASES.**  
 .....

'can' be subject to conflicts of interest' does not make it so in all cases.

Nevertheless, governments and the general media, in particular in Europe, have spent the past several years whipping themselves into a froth of suspicion over the state of price-reporting in commodities markets. Governments have also spent a fair bit of money, rightly so, trying to get to the bottom of their suspicions.

### IOSCO Principles

Beginning in 2011, the International Organization of Securities Commissions (IOSCO), as the body representing the majority of international financial regulatory authorities, conducted an in-depth review of price-reporting in the crude oil market, in collaboration with the IEA and IEF, and made recommendations designed to help prevent manipulation of oil price indices. Known as the 'IOSCO Principles', the recommendations largely codified pre-existing methodology and transparency practices, but added a layer of transparency through the recommendation that price-reporting agencies (PRAs) submit to external auditing of their price-reporting methodologies and standards.

The Principles have been embraced and implemented by all large-scale price-reporting agencies, including Platts, Argus, ICIS, OPIS, and RIM. All have applied the principles to *all* the commodities markets they cover, including those for natural gas, metals, petrochemicals, and fertilizers.

### Investigations of oil market behaviour

Not to be outdone by IOSCO, however, the EU's competition authorities in

2013 launched a much-publicized probe into oil pricing, with raids on the offices of Shell, BP, Statoil, and Platts.

In 2012–13 Ofgem and the UK Financial Conduct Authority (FCA) meanwhile conducted an investigation into alleged manipulation of natural gas prices after ICIS reported apparently anomalous trades to them.

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**'ENERGY TRADERS FOR THEIR PART ARE FOND OF BLAMING MARKET MANIPULATION FOR THEIR OWN MISTAKES.'**  
 .....

Politicians are fond of saying there is no smoke without a fire. Energy traders for their part are fond of blaming market manipulation for their own mistakes.

The world has rather short memories, however. Who remembers, for example, the EEC's 1980s investigation of alleged price-fixing in European oil markets? Or the 1936–7 US anti-trust lawsuit against Platts and 23 US oil companies, still the largest criminal prosecution ever brought in the USA. These pieces of history seem nowhere to be found in regulatory memory. Indeed, they are nowhere to be found on the Internet, either. Platts' PR department appears to have expunged the 1930s investigation from the company's official history, despite the fact that it exonerated the company fully; and the EU appears to have lost all records of its 1980s probe into suspected oil market malpractice.

For the record, however, let's just repeat that neither of these historical investigations found any evidence of wrong-doing. Likewise, Ofgem's recent gas market investigation, which focused on a particular pattern of



trading in 2012, concluded that no price manipulation had taken place. Markets await the outcome of the EU's Shell-BP-Statoil-Platts probe with interest. To date, nothing has emerged, aside from UK government criticisms of the probe as 'political posturing.'

Part of the reality is that governments, which are after all elected by energy consumers, tend to launch investigations into market manipulation when prices go up. There is no traceable history of similar investigations into *falling* prices, despite the fact that most oil market participants in the so-called developed world ought primarily to be motivated to push oil prices down rather than up, since on balance they are buyers rather than sellers.

In recent years, however, as the EU text above shows, the simple existence of investigations into possible market manipulation has increasingly been cited in media reports, opinion pieces by self-styled 'market experts', and even regulatory documents, as *evidence that the manipulation exists*.

It's interesting to note that in two years of research into crude oil markets, IOSCO's work in drafting its 'Principles for Oil Price Reporting Agencies' (produced in October 2012), cites only three examples of attempted manipulation of price-reporting agencies over the course of the previous 20 years. Of these examples, two relate not to oil price-reporting but to natural gas markets in the USA.

The remaining case, which is an oil market case and relates to an incident in 2003, is an account of an alleged attempt by Marathon Petroleum to influence Platts crude oil prices. Note the word 'attempt'. To quote IOSCO directly, itself quoting a CFTC (Commodity Futures Trading Commission) order:

'Marathon Petroleum Company LLC (MPC) settled charges for *attempting to manipulate* a price of spot cash West Texas Intermediate (WTI) crude oil delivered at Cushing, Oklahoma on November 26, 2003, by *attempting to influence* downward the Platts market assessment for spot cash WTI for that day. As a net purchaser of foreign crude oil priced off of the Platts spot cash WTI assessment *if its conduct was (sic) successful*, MPC *would have benefited* from lower Platts spot cash WTI assessment. The order finds that, on November 26, 2003, MPC purchased NYMEX WTI contracts with the intention of selling physical WTI during the Platts window at prices intended to influence the Platts WTI spot cash assessment downward. Further, during the Platts window, MPC knowingly offered WTI through the prevailing bid at a price level calculated to influence downward the Platts WTI assessment.'

There are three things to say about this.

- First, the final assertion, namely that Marathon 'knowingly offered WTI through the prevailing bid' appears to be incorrect. Platts insiders indicate that, at the time IOSCO's report first appeared, they checked their records and found that Marathon had not in fact 'offered through the bid' at any point. Indeed, Platts price-reporting methodologies – and those of its competitors – make it impossible for nonsense offers of this kind to be taken into account by price reporters. The methodologies prescribe that anomalous offers (or bids) are automatically ignored on the basis of the simple and logical premise that no one in their right mind would offer below an existing bid if they were

seriously attempting to sell a cargo of oil at the highest available market price.

- The second thing to note about the cited example is that it is written entirely conditionally:

'If its conduct was successful, MPC would have benefited from lower Platts spot cash WTI assessment.'

The reality is that the oil company did not benefit from lower prices, because the price-reporting agency's methodology ensured that no misconduct of the kind cited was possible.

- Thirdly, activity of this kind is already proscribed under existing law and market abuse regulation in both the USA and Europe.

The question is therefore: why is this case being cited as evidence of the need for additional regulation? The Marathon case, which is now 12 years old, appears to be the *only oil* market case IOSCO was able to cite. And it is arguably evidence not of the need for regulation, but of the success of PRA methodologies in deterring attempted manipulation.

### Investigation of natural gas market behaviour

This leaves IOSCO's two cases from the US natural gas market. One relates to trading behaviour. That is, in 2008, the CFTC fined Energy Transfer Partners of Dallas Texas USD 10 million for selling 'massive quantities' of natural gas on the Intercontinental Exchange – a futures exchange – in order to drive prices down and benefit the company's swaps position.

There is no suggestion that the sale of the massive quantities did not take place. But since it is incumbent on price-reporting agencies to base the prices they report on real transactions,

it is hard to see how such behaviour could be represented as manipulation of price-reporting agencies.

This is a key point, and one that is often overlooked or misunderstood. There is a difference between pushing a market around, and pushing a price-reporting agency around.

'Manipulation', in other words, is a slippery word with many definitions. In the eyes of a regulator, a market is manipulated if a player or group of players causes prices to do something they would otherwise not 'normally' have done. This includes using a leveraged position to profit in one market area from activity in another. It also includes use of a privileged position to influence underlying supply (or less obviously, demand).

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**'A PRICE-REPORTING AGENCY CANNOT REPORT WHAT PRICES "OUGHT" TO BE, ONLY WHAT THEY CAN BE SHOWN TO BE.'**  
 .....

In the eyes of a price-reporting agency, however, such 'manipulation' can only be reported on. The price of oil is whatever the price of oil is, provided that it results from market behaviour. That is to say, it is not, nor can it ever be, the role of a price-reporting agency to somehow *counteract* genuine market behaviour. A price-reporting agency cannot report what prices 'ought' to be, only what they can be shown to be. So IOSCO's second example appears to be irrelevant as well.

There are essentially only two types of activity against which price-reporting agencies should arm themselves. These are:

- activities which create the appearance of market activity – wash-trading and its analogues, and
- outright fraud or lying.

This brings us to the final case cited by IOSCO, again from the natural gas

market. This is the now-infamous case of how, early in the 2000s, a number of natural gas traders in the USA supplied fabricated deals data to Platts for inclusion in its natural gas indices.

This may be the only established case in history of market participants successfully manipulating the *number published* by an energy price publication – rather than manipulating the market itself. Those gas traders who participated in this exercise did so by straightforward fraud: inventing trades that had never happened, and exploiting a submission mechanism that lacked a means to check their veracity.

There are two things to note about this case.

- First, it was the price-reporting agency itself, Platts in this case, that detected the fraud in 2003 and blew the whistle on it, without the presence of any regulatory framework.
- Second, that even though this is the only apparent case of demonstrated price manipulation in history, some regulators have gone on to suggest that *this very practice* – the submission of unchecked deals information into a mechanized process – is the best way to safeguard against future manipulation of price publications.

That makes little sense. Safeguarding markets against manipulative behaviour cannot be achieved by mechanization.

### Spoofing

Indeed, concerns voiced by regulators as recently as October 2015 about 'spoofing' in electronic trading systems for energy highlight the problem. Spoofing is the practice of posting bids or offers in a trading system with the purpose of creating the impression that

a tradable price exists at the posted level, and then rapidly withdrawing the bid or offer before a counterparty can 'hit' the price. Since the rules built into exchanges permit the withdrawal of bids and offers, this practice is 'permitted' by electronic systems, and is difficult to guard against.

By contrast, most PRAs have long since built into their methodologies a principle that spoofing a bid or offer by reporting it to the PRA and then 'flaking' on the price level indicated in effect constitutes a lie. To be fair to the regulators, over time first IOSCO, and latterly perhaps the EU's legislators too, have come to appreciate that such methodological safeguards are not accidental; and that the initial assumption that *all* benchmarks were somehow as compromised as LIBOR was not, in fact, correct.

Indeed it seems likely that the EU's final regulatory text will back away from lumping PRA methodologies into the same basket as those that were shown to be founded in fundamental conflict of interest. The proposed 'compromise text' of the EU's regulatory draft for financial benchmarks states, quite mildly, only that:

'All benchmark administrators are potentially subject to conflicts of interest, exercise discretion and may have inadequate governance and control systems in place.'

And the latest draft of the EU Parliament's text notes that:

'Accordingly, certain provisions of this Regulation are not appropriate to apply to commodity benchmarks. Principles developed for commodity benchmarks by IOSCO in collaboration with the International Energy Agency and the International Energy Forum, among others, are specifically designed to apply to all commodity



.....  
**'NEVERTHELESS, THE CONVICTION  
 REMAINS AMONG MANY REGULATORS  
 THAT A SINGLE APPROACH "OUGHT TO"  
 WORK FOR ALL MARKETS.'**  
 .....

benchmarks and therefore this Regulation provides that certain requirements will not apply to commodity benchmarks.'

Nevertheless, the conviction remains among many regulators that a single approach 'ought to' work for all markets.

#### Automation and averaging

This brings us to the second issue that has dogged the relationship between regulators and commodities markets: automation. And with automation: averaging.

An average is a very interesting thing, from an abstract point of view. As a statistical tool, averaging can be invaluable in providing information about everything from the behaviour of subatomic particles to the behaviour of teenagers. Averages are the cornerstone of the insurance industry. However, as any insurance broker will ruefully concede, averages are not much use when it comes to predicting floods, let alone dealing with them. The *average* height of the tide in the coastal Netherlands tells us nothing about whether or not a *specific* high tide will flood half the country.

Averages have some obvious characteristics. They are most useful – they provide most information – when they involve a very large sample, or a sample over a long period of time. They are least useful – that is to say, least likely to deliver meaningful information – when they involve a small sample or a short period of time. And, obviously, they wink out of existence altogether when the sample size hits one, or worse, zero.

This makes an average a plausible mechanism for agreeing on a typical value in a market with very high liquidity. And indeed price-reporting agencies make extensive use of averaging, under appropriate circumstances – for example in natural gas markets, where there are large numbers of deals.

Clearly, if we average foreign exchange transactions over the course of a day, we will get a number that is broadly representative of that day's activity.

Ironically, however, no one cares what the broadly representative number is. You cannot trade foreign exchange at a broadly representative number: only at the *latest* number. Similarly for stock exchanges and other very high liquidity markets. The average for the day is a statistical accident, based on the distribution of trading volume, which is a random event. *When* people choose to trade will have an impact on the resulting average. In terms of the value represented, the average therefore equates to the price at a random time somewhere between the open and the close.

If we look closer, we discover that it should also be the case that the random time represented is, to some extent, determined by volatility. The more volatile the period of the day, the higher the traded volume is likely to be, as buyers and sellers slug it out over market direction. That means in turn that a weighted average for the day will probably *over-represent* the most volatile period of trading for the day. In the worst case interpretation, the average is determined, or at least unduly influenced, by periods of atypical market activity.

The conundrum of averages gets more complicated when we start to examine the impact of averaging on markets such as those for oil, where the market's economics depend primarily not on the outright price of oil, but on the spreads between different pieces

of the market complex. Those spreads can be qualitative: the difference in value between Brent crude oil and Oman/Dubai, for instance. They can be differentials in forward time: July BFOE (Brent, Forties, Oseberg, Ekofisk) versus August BFOE. Or they can be differentials in the processing chain: the spread between the price of crude oil and the price of gasoline.

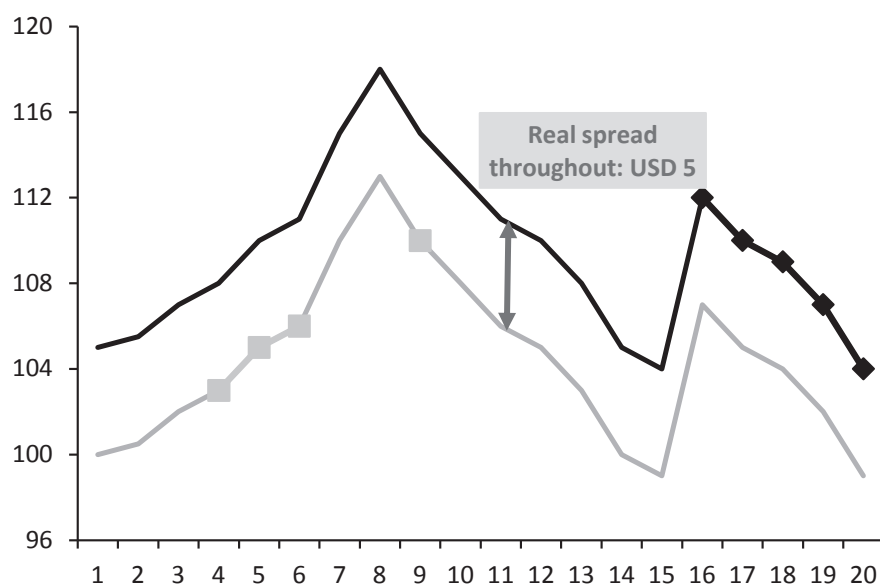
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**'TRADING EFFICIENCY ENSURES IT IS  
 RARELY POSSIBLE FOR A SIGNIFICANT  
 GAP TO OPEN OR CLOSE IN A SPREAD  
 MARKET.'**  
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Typically these relationships are far less volatile than the outright price itself. Trading efficiency ensures it is rarely possible for a significant gap to open or close in a spread market. If crude oil tracks higher, so does gasoline.

So far so good. However, in the real world, the traded volume of physical oil is actually very low. There are not thousands of trades per day, as there are in futures markets, but literally only a handful, at best. This means that as the market complex moves higher or lower, the time at which a trade takes place has a disproportionate influence on the resulting average price.

Consider the example in the chart 'Averaging in thin markets', shown on the next page. The two markets (indicated by the two lines) have an intimately linked spread relationship: as one moves higher, so does the other. And vice versa. However, the markets in question are in the habit of trading actively at different times of the day. The market represented by the lower line trades mostly in the morning (the square points on the line), while activity in the market represented by the upper line is concentrated in the afternoon (the diamonds on the line). This is not hypothetical. There are real markets which exhibit this behaviour: for example where the market represented





Averaging in thin markets

by the upper line has a close relationship with another geographical market that is not open at a time when it is morning for the market represented by the upper line – as happens with European and US markets, obviously.

In the example, a succession of lower line trades occurs during the rising market of the morning. The afternoon sees markets fall somewhat and five upper line trades yield an average of USD 108.40. This compares with the lower line trades averaging USD 106. There is an apparent spread between lower and upper of USD 2.40. But this spread is entirely inaccurate. The real gap between the lower and upper markets is more than twice the spread indicated by the average: it is USD 5/barrel.

Clearly, under these circumstances, any price determination system that produces such an anomalous outcome is not to be trusted. Yet indexation based on weighted averaging is the recommendation for all price determination methodology that we see coming from many regulators the world over. This is not to say that weighted averaging does not have a place. As noted it works well in some markets

and is used by PRAs where appropriate. But it is clearly inappropriate in thinner markets, and positively misleading in markets where inter-product spread relationships are important.

There is also a school of thought which says that more reliable benchmarking may be obtained by averaging *not just* the transactions for the day, but also the prices published by a range of price-reporting agencies.

However, if agencies B and C have better methodologies than agency A, then surely including agency A's number in the mix simply dilutes the quality of the supposed benchmark? You don't get better wine by mixing the output of the top Bordeaux vineyards with the output of wineries in Scotland. In fact, averaging the prices published by multiple pricing agencies is almost guaranteed to result in a 'muddy' number – representative of neither one methodology nor another.

#### Static model vs evolutionary and use of 'judgement'

This brings us to the third major theme: the difference between a static model, and an evolutionary one.

Upper line trades average USD 108.4

Lower line trades average USD 106

Apparent spread: USD 2.40

.....  
 '... THE TERM "JUDGEMENT" HAS  
 BECOME PEJORATIVE IN SOME  
 QUARTERS, IN THE CONTEXT OF  
 DETERMINING MARKET VALUE.'  
 .....

In the idealized world of the politician seeking to protect consumers from market manipulation, price determination should be taken out of the hands of those who might fall prey to such manipulation and be entrusted to mechanized systems, robots in effect, that do not use things like 'judgement' as tools in price determination. It's interesting that the term 'judgement' has become pejorative in some quarters, in the context of determining market value. It's as if the term implies that wide-eyed price reporters are making arbitrary decisions about what prices should be, without regard to what is actually happening in the market-place. That picture is quite false.

'Judgement' at price-reporting agencies enters the picture in two ways:

First: in *determining* what parameters should be used in the creation of a market-measurement methodology;



and when it is appropriate (with market consultation and input) to change those parameters.

Second: in the *application* of the methodology itself, judgement can be used, under exceptional circumstances (accompanied by an explanation as to why) to deviate from a strict application of the rules (which a robot would always enforce) to ensure that the *objective* of the methodology is achieved in the face of anomalous data. This can happen, for example, in relation to a transaction that *appears* to conform to the rules of the methodology, but violates its spirit.

No regulatory regime, and no methodology can ever fully deter a single rogue trader from attempting to manipulate a market. The purpose of the application of judgement in methodology design and its application is to forestall such attempts.

The objective of price-reporting agencies is in general to report prices at which transactions are typically possible. For this reason, they usually express price assessments in terms of a range – the meaning of that range is usually: ‘a typical deal is possible in this market at a number between price A and price B’. *Judgement* enters the picture because of that term ‘typical’. In theory a transaction is possible at any price. But the PRA must determine if the price is a one-off ‘unrepeatable’ fluke, an attempt at manipulation, or genuinely representative of market value. This requires investigation of the circumstances surrounding the transaction, and, especially, consideration of data that is not transactional – in particular the prevailing levels of bids and offers at the time of the transaction.

All these things inevitably involve the thing called ‘judgement’. No conceivable automated rule on earth can perform as well as human intelligence in sorting ‘representative’

from ‘borderline’. And, it must be remembered, eliminating the borderline is 95 per cent of the job of the price-reporting agency. It may be that PRAs discount large numbers of perfectly genuine trades in the process of arriving at their market prices. Indeed, this is probably one of the reasons why market participants are given to complaining about PRAs: they are inherently conservative, and will discount a transaction if there is a reasonable possibility that it is non-repeatable – the product of fluke or deliberate manipulative intent.

#### Rationale for IOSCO recommendations

Ultimately, IOSCO showed in-depth understanding of this state of affairs in producing its final recommendations for the crude oil market, in acknowledging that there are markets in which seemingly concluded transactions alone cannot determine value. IOSCO was criticized in some quarters for taking this position. But it was correct to do so.

It also showed substantial restraint in the matter of the disclosure of *process*. There is a school of thought which would demand that all methodological process be laid bare in the interests of benchmark transparency. The counter-argument, which has prevailed under IOSCO for now, is that full methodological disclosure is analogous to requiring banks to publish details of their security systems.

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**‘IT IS IMPOSSIBLE TO DESIGN A  
 MECHANISTIC PRICE DETERMINATION  
 SYSTEM THAT WILL NOT FAIL UNDER  
 EXCEPTIONAL CIRCUMSTANCES ...’**  
 .....

If we hand determination of market value to the robot, the robot will typically include flukes and anomalies in its price assessments. Worse, it may also include deals that are manipulative in intent or fall outside the bid/offer

range. It is impossible to design a mechanistic price determination system that will not fail under exceptional circumstances, and which is not susceptible to evolving market sophistication or deliberate attempts to ‘game the system’.

#### Price settlement methodologies

If we look at the methodologies for price settlement of all futures exchanges the world over, the problem becomes apparent. Typically, these methodologies will state that settlement prices will be determined by averaging the final x minutes of trading in the course of the day. The assumption is that the final x minutes will always contain enough trades to make this possible. This is fine – usually – in successful, active, liquid markets. However, for newly launched futures contracts the assumption that trading volume will be sufficient at the close for this rule to work is distinctly unproven.

Therefore the exchange includes a second provision in its rules: in the event that there are fewer than y trades in the closing period, the settlement price will be determined by taking trades over period z. Furthermore, in the event that there are *no trades in period z either*, the settlement price shall be determined by a ‘panel of experts’. Who sits on this panel is frequently a mystery.

If a price-reporting agency were to publish such a methodology it would lose all credibility in the marketplaces it serves. The fundamental problem with the rules the exchanges outline is that the *basis of measurement* is arbitrarily changed by the rule itself. ‘The price is derived from five minutes of trading, except on slow days, when it is derived from an hour’s trades.’

There are two problems here. The first is obvious. We are not comparing like with like. The second is more

insidious. It is that the *existence of the rule* provides an exploitable trading opportunity.

This has important implications for how best to manage price determination in markets where volume is *not* guaranteed – that is to say, physical commodities markets. The creation of rules also creates trading opportunities. This is true whether a robot is in charge or not.

If I declare that markets will be measured at 4.30 p.m. each day, traders interested in the outcome of that measurement will tend to try to execute a trade at 4.30 p.m. If I declare that markets will be measured by averaging all trades over an eight hour period, traders interested in the outcome of that measurement will try to execute as many trades as possible at a price which favours their position. There is nothing to stop a trader from buying and selling at the same price. Indeed, it's a commonplace. The fact that if I buy at USD 100 and sell at USD 100 I have created two verifiable transactions, both at USD 100, *without spending any money* at all and this does not seem to worry the fiercer advocates of averaging. In a thin market, however, we can argue that it *should*. Even, indeed, in a not-so-thin market.

One of the great disadvantages, indeed, of electronic trading is that it is typically anonymous. It is hard to determine whether 500 transactions at USD 100 are the result of 250 buyers buying from 250 sellers, or two people selling and buying from each other by pre-arrangement at an identical price. One of the great and overlooked advantages of price-reporting agencies is that they are typically aware of the identities of who sold to whom, even if they agree not to disclose this information, and repeated to-and-fro *de facto* wash trading of the kind suggested is easy to detect.

### Transparency and evolution of methodologies

The assumption on the part of politicians that exchange-based trading is somehow safer from manipulation is thus arguably one of the bigger errors in this whole debate. There is no market on earth, we might assert, that is more transparent than the North Sea physical crude oil market. Every trade is reported, by multiple PRAs, and indeed by brokers. The names of the parties to every trade are reported. The individual bids and offers leading up to their trades are also reported, and commented on. The news that drives the price is reported in real time by at least four independent global news-reporting organizations. The physical prices themselves are invariably constrained, indeed virtually dictated, by one of the most liquid futures markets on the planet. Deriving the physical price of BFOE from market activity is arguably the easiest market-reporting exercise on the planet.

Why then was this market the focus of so much scrutiny four years ago? Answer: at heart, because the price of the commodity was five times higher than it was a decade ago. Indeed, if the EU backs away from some of its more draconian ideas for regulating commodities markets today, it may well be in part because the political pressure to *act* has evaporated with the fall in energy market prices since mid-2014.

However that may be, the ability of PRAs to report this and other markets successfully is critically dependent on one thing – the freedom to evolve and adjust market reporting methodologies as markets themselves evolve. A methodology that works today may not work tomorrow.

The greatest danger inherent in the attempted regulation of commodities markets is therefore not the tendency of

regulators to prefer statistical methods over time-specific ones, or to assume exchange-trading will eliminate the potential for market manipulation. It is the tendency to believe that once a problem is solved, it is solved.

In short, the temptation to impose static rules on price-reporting organizations has more potential to damage the good functioning of energy and commodities markets than any other step.

So what does success look like?

Unless we can change human nature we need to accept that from time to time someone will attempt to break the rules and try to influence a market unfairly. The politician's dream of legislating attempted manipulation out of existence is just that: a dream. The efforts of EU regulators to impose additional governance constraints on PRAs emerges in this light as just that: a desire for control, rather than a desire to reduce manipulation, and one that could have dangerous consequences for proper market function if the control sought impedes free competition among PRAs or prevents them from doing their jobs.

### ‘THE MARKET NEEDS A CERTAIN LEVEL OF TRANSPARENCY TO ENSURE ATTEMPTS TO MANIPULATE ARE EXPOSED.’

The market needs a certain level of transparency to ensure attempts to manipulate are exposed. This means it needs independent parties observing markets – price-reporting agencies in other words – who are in a position to spot the behaviour, and have the freedom to evolve their methodologies as markets themselves evolve; and then we need regulators to address the behaviour.

This describes exactly the situation we see today in commodities markets. We tamper with this situation at our peril.

## Will MiFID II hurt industrial players in Europe?

Andreas Walstad

Much of the criticism of Europe's regulation of trading has focused on its potential impact on large companies with substantial physical and derivatives market exposures. There has been much less focus on the potential fallout from the new regulations on industrial players for whom energy trading is a sideshow. But stakeholders in the European power and gas industry have highlighted the risk that the EU's revised Markets in Financial Instruments Directive (MiFID II) could seriously damage industrial players and consequently hurt liquidity in European power and gas markets.

### Concern over extension of regulation to non-financial companies

An open letter – published on 15 October – called for caution. It was signed by the energy trade groups Eurogas (an association representing the European gas wholesale, retail, and distribution sectors) and Eurelectric (an association representing European electricity producers, suppliers, traders, and distributors), as well as the European Federation of Energy Traders (EFET), and a number of energy-intensive industries.

The letter said in part: 'We note with concern that the European Securities and Markets Authority's (ESMA's) final proposal for level 2 measures is designed in such a way that many non-financial companies trading in commodity derivatives on an ancillary basis to their main commercial group business would risk capture in the scope of MiFID II, facing as a consequence disproportionate capital, prudential and liquidity requirements normally applicable only to investment banks.'

Whereas energy and energy-intensive companies were largely exempted from the obligations under MiFID I, the revised directive cast the net much wider. Brussels wants deep, liquid, and transparent derivatives markets and to achieve this it believes investor protection and counterparty risk are key challenges that need to be addressed, also in energy markets.

However, the question arises as to whether Brussels is burdening non-financial companies with a directive that is too stringent relative to their market share and the financial risk they pose.

One key issue is that companies that do not secure exemptions from MiFID licensing would be subject to capital requirements under the EU's Capital Requirement Regulation (CRR). That means energy companies and energy-intensive industries would have to prove they have enough cash to cover trading losses, depending on their risk profile and financial structure. Energy producers will basically be treated like investment firms and will be subject to capital requirements under the CRR.

### ..... 'ENERGY PRODUCERS WILL BASICALLY BE TREATED LIKE INVESTMENT FIRMS AND WILL BE SUBJECT TO CAPITAL REQUIREMENTS UNDER THE CRR.'

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Energy companies and industrial players have argued vigorously that they do not pose systemic risk and should therefore not be regulated as banks. Another argument is that industrial players are rich in assets – not in cash – hence it is unreasonable that regulators expose them to stringent capital requirements. Additionally, they lack the staff and experience to deal with financial regulation of this scope.

But these arguments – however valid – seem to fall on deaf ears in Brussels. Few seem to believe that industrial players will now secure last-minute exemptions to the capital requirements under MiFID II. If the battle is lost on MiFID II exemptions, lobbying for amendments to the CRR, and designing a capital regime which is appropriate for firms with substantial physical assets, may be a better idea. Although amending the CRR may be difficult to achieve in practice, Brussels will listen to the industry's concerns if the arguments come across as sufficiently compelling.

### Potential adverse effects from MiFID II

The open letter said that the new rules could force industrial players out of European energy markets, and that the direct cost to energy markets would amount to at least EUR 15–20 billion per year. Although it is hard to put a precise figure on the cost of market participants leaving or reducing their activity in European gas and power markets, there is no doubt that reduced liquidity will eventually harm consumers in terms of higher energy prices. After all, energy-intensive industries such as aluminium, steel, and chemical production are key players in wholesale energy markets. The energy bill for some aluminium producers is around 40 per cent of production costs. Hence the need to hedge their exposure to energy price volatility is self-evident.

It appears reasonable to argue that the proposed rules drawn up by ESMA do not go far enough in exempting non-financial companies from trading commodities derivatives on an ancillary basis. For instance, ESMA's methodology, for use by non-financial



companies when applying for an exemption from MiFID licensing, takes no account of the company's asset base and primary commercial business.

Instead, ESMA has set out thresholds based on the total trading activity for non-financial firms. That means a non-financial firm may be exempted from MiFID II if its trading in gas derivatives constitutes less than 3 per cent of its total trading activity. For power derivatives, the proposed benchmark is 6 per cent.

It would make sense to include a 'capital employed test' to be added as an additional option for non-financial firms. This is also what many stakeholders seem to want. A capital employment test was proposed by ESMA in December last year, but has since been abandoned. Such a test would allow comparison of the capital invested in commodity derivative transactions with the capital employed in assets and commercial activities at group level.

In addition to capital requirements, MiFID II will also impose position limits on energy trading. The position limits will range from 10 per cent to 40 per cent of deliverable supply. Again, the main concern is that players will leave markets or reduce trading activity substantially, due to perceived over-regulation. Players leaving could also affect security of supply.

#### **Industrial players should be treated differently**

Brussels is of course right to revise its market rules in the wake of the 2008

financial and banking crisis. Taking the necessary steps to strengthen investor protection and minimize counterparty risk is key to achieving trust and stability in derivatives markets. It is also understandable that the EU does not want to give outright exemptions to companies trading energy derivatives. Reducing counterparty and default risk should ultimately benefit these markets in the longer term.

Let's not forget that many European energy markets are still seeing low levels of liquidity and competition. In wholesale gas, the trading hubs TTF (the Dutch Title Transfer Facility) and NBP (Britain's National Balancing Point) are the only gas hubs in Europe with more than 100 registered participants each and churn ratios above 10, according to a market monitoring report released by the Agency for the Cooperation of Energy Regulators (ACER). A liquid market typically has multiple buyers and sellers, allowing trades to move quickly in and out of positions.

Several banks and other financial institutions have left or downscaled energy trading in order to focus on their core markets such as equities and fixed income instead. Whether a tighter regulatory regime for energy derivatives will actually make banks return to these markets remains to be seen. Banks have vast experience in dealing with financial regulation; it is not unthinkable that they will see a tighter regulatory framework as at least one of several reasons to return to energy trading in the longer term.

All things considered, it is not hard to sympathize with industrial players

who do not want to be regulated on an equal footing with investment banks. A legitimate concern is that binding capital requirements under the CRR could force these firms to sell off assets to downsize or, alternatively, try to attract more equity capital from owners.

MiFID II is one of several legislative instruments drawn up by Brussels in response to the financial crisis. The Market Abuse Regulation/ Directive and the Regulation on Energy Market Integrity and Transparency – as well as the European Market Infrastructure Regulation – are also in the process of being implemented. Moreover, the obligation to report trades under the Regulation on Wholesale Energy Markets Integrity and Transparency (REMIT) came into force on 7 October.

The European Commission has until the end of December to decide whether to adopt the technical standards proposed by ESMA. The directive is expected to enter into force in January 2017.

#### **... THE INDUSTRY'S CALL FOR MORE FLEXIBILITY SHOULD BE TAKEN SERIOUSLY.'**

Although a tighter regulatory framework on energy trading will likely deliver long-term gains, the industry's call for more flexibility should be taken seriously. A longer phase-in period for non-financial firms is one option. A grace period of, say, three years would give industrial players breathing space to adapt to the new requirements under MiFID II.



# The impact of financial regulation on energy markets

Andrew Tuson

Since the financial crisis, we have seen governments and regulators seek to introduce regulatory change to prevent the manipulation of financial markets and to protect consumers. Whilst the regulatory changes proposed may work well for financial markets, their application to energy markets in fact poses risks to the orderly operation of those markets. It appears that governments and regulators have failed properly to consider how their proposals will impact the energy markets in particular and how the price of physical commodities is generated.

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**‘... GOVERNMENTS AND REGULATORS HAVE FAILED PROPERLY TO CONSIDER HOW THEIR PROPOSALS WILL IMPACT THE ENERGY MARKETS ...’**

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In the UK, commodity markets have come more sharply into focus since the financial crisis. Press reports have suggested that the oil market may have been manipulated just as the LIBOR rate was manipulated. In the UK, HM Treasury, the Bank of England, and the Financial Conduct Authority (FCA) have conducted a year-long review into the fixed income, currency, and commodity markets through the ‘Fair and Effective Markets Review’ (the Review). The Review has published detailed recommendations on how markets, including the energy market, should be adapted in order to avoid the risk of market manipulation.

The Review found that prior to the financial crisis, regulatory focus centred on the operation of the equity markets and on ensuring that prices of equities and other products were not distorted. The Review identified that regulation of fixed income, currency, and commodity markets should be brought into line with that of equity markets, and that

regulatory regimes and focus relating to the equities markets should be extended to cover the commodity markets. As a result, the Review found that products traded within the fixed income, currency, and commodity energy markets should fall within the scope of the market abuse regime in the UK and that authorized firms should ensure that adequate surveillance is conducted across these markets in order to identify the risks of potential manipulation. Arising out of the Review, one key area in which regulation is developing in the UK, and also across the European Union, is in relation to the way in which benchmark prices are produced.

In the UK, as a result of the Review, the crude oil futures market’s principal financial benchmark, the ICE Brent Index, has become a regulated benchmark. This benchmark, along with seven others, has been determined as being of such importance to the UK financial system that the way it is produced is now subject to FCA rules which govern how the benchmark price is calculated. The other seven benchmarks now regulated in the UK as a result of the Review include financial rate benchmarks such as the LIBOR and the WM/Reuters London 4pm Closing Spot Rate.

At European level, the European Commission is proposing to introduce a regulation, referred to as the Benchmark Regulation, which will govern the way in which all benchmarks are used within the European Union. Benchmarks include indices used to set the price of financial instruments or certain financial products within the European Union. Negotiations regarding the terms of the Benchmark Regulation are on-going.

The main problem with the European Commission’s current proposals for the Benchmark Regulation is that they do not sufficiently address the difference between rate markets and physical markets. In the rate markets, such as foreign exchange, the benchmark price is derived from the details of trades conducted on exchange. In other words, there is no requirement on those who conduct the trades to decide whether their trading data should be used for the purpose of setting the FX benchmark rate. However, in the physical markets, such as the oil market, the benchmark price is set by price-reporting agencies who assess the volume and prices of transactions conducted in a particular window. Given that such transactions are conducted ‘over-the-counter’, rather than on exchange, in the physical markets there is no central repository of trading data. This means that price-reporting agencies in the physical markets are reliant on market participants speaking to them, providing market information, and voluntarily disclosing details of the transactions conducted. Unless this happens, price-reporting agencies will not have access to data enabling them to set their benchmark price.

## Market participants

Through the proposed Benchmark Regulation, those who contribute data to price-reporting agencies would be subject to stringent regulatory criteria. These criteria include requirements that contributors should not provide any data where there is a conflict of interest and that they sign up to a code of conduct set by the price-reporting agency. The code of conduct would prescribe the issues which market participants would be

required to take into account in order to provide details of their trades to the price-reporting agency. If these criteria are not met, sanctions could follow, including the right for authorities such as the FCA to seize documents and information and to issue fines.

As a result of these proposed regulatory changes, market participants may become concerned about the risks of breaching the requirements of the Benchmark Regulation. Market participants may therefore decide that they should cease to speak to price-reporting agencies and give details of their trades, in order to avoid potentially breaching the Benchmark Regulation. Uncertainty over how regulators are likely to interpret the proposed regulation and impose sanctions could again make it less likely that market participants would be willing to continue to provide details of their transactions to price-reporting agencies. If fewer market participants speak to price-reporting agencies and disclose details of their transactions, this in turn would reduce the amount of data available which price-reporting agencies could use in order to set the benchmark price of energy commodities.

These difficulties do not apply in the same way in the rate markets. For example, a market participant who enters into a transaction in the FX market will not have a choice over whether the details of that transaction are taken into account for the purpose of WM / Reuters calculating their London 4 p.m. Closing Spot Rate. Such data will automatically be provided by the exchange to the price-reporting agency when the daily benchmark price is calculated.

### Price-reporting agencies

Concerns over the effect of the proposed Benchmark Regulation extend beyond the issue of market

### ‘CURRENTLY, PRICE-REPORTING AGENCIES USE THEIR EXPERT MARKET KNOWLEDGE FREELY, TO ADJUST FOR ABNORMAL MARKET CONDITIONS.’

participants disclosing details of their transactions to price-reporting agencies. Price-reporting agencies themselves are also facing additional regulatory burdens. Two concerns arise in particular, discussed below.

The first concern is that the approach taken by the proposed Benchmark Regulation is that price-reporting agencies should produce their benchmark price based on an average price of the trades conducted on any one day, or in any particular trading window. If price-reporting agencies derogate from this approach and apply their own analysis to trades conducted, they are taking the risk that regulators may determine that they are not using an appropriate methodology. This risk does not apply in the rate markets, where an average price of trades conducted on any one day may be applied in order to create an accurate benchmark price. However, in the physical energy markets, simply taking an average of transaction prices conducted on any one day could in fact lead to distorted and unreliable pricings. Given the vagaries of supply and demand in the physical markets, the number of transactions conducted on any one particular day may be unusually low, or traded at an unusually high price. Where this happens, simply taking an average of the transaction prices made on any one particular day could lead to benchmark prices becoming dislocated and volatile. Currently, price-reporting agencies are able to use their expert market knowledge freely, in order to adjust for abnormal market conditions. If price-reporting agencies felt constrained from applying their expertise to adjust transaction prices to take account

of unreliable market data, this would be likely to damage the accuracy of benchmark pricings.

A further concern for price-reporting agencies in the energy market is that those who act as price-reporting agencies are not generally set up specifically for that purpose, but rather act as journalists reporting on market developments in the industries they cover. Often, the benchmark price they produce is a by-product of their principal activity. However, as a result of the requirements currently in the Benchmark Regulation, price-reporting agencies will need to become authorized firms and be regulated by their local regulators, such as the FCA in the UK. As a result of this regulatory scrutiny and the potential sanctions where regulators may seize documents and information belonging to a price-reporting agency in the event of a suspected breach of the Benchmark Regulation, there is a risk that some price-reporting agencies may consider that their ability to conduct their primary function – acting as journalists – is constrained. Under the proposals, journalists would not be able to refuse to disclose the source of their data and would have to hand over their source data if required. If some price-reporting agencies determine that they do not wish to be regulated in the way proposed by the Benchmark Regulation, this could adversely impact the market, as there would be fewer price-reporting agencies competing with each other to produce the most accurate and reliable benchmark price in the market.

### Reform of energy markets

Whilst the European Commission has acknowledged that there are some differences between the rate markets and the physical commodity markets, and whilst they have sought to draft some derogations from their



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**‘... THE DEROGATIONS DO NOT GO FAR ENOUGH IN ADDRESSING THE FUNDAMENTAL DIFFERENCES BETWEEN RATE AND ENERGY MARKETS.’**

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requirements in relation to rate markets, the derogations do not go far enough in addressing the fundamental differences between rate and energy markets.

Given the risk of damage to the energy markets which could be caused through proposed regulatory reform in this area, it is perhaps surprising that regulators have not fully considered the implications of their proposals. Whilst there is an understandable political driver to introduce regulatory reform which addresses the causes of the financial crisis, the energy markets cannot be said to have been involved in the causes of the financial crisis in the

same way as financial markets were. Governments and regulators would control these markets more effectively through gaining an understanding of how the markets operate in practice and by working to achieve reforms if these were considered necessary. In this regard, it is notable that the International Organization of Securities Commissions (IOSCO) produced guidelines for the creation of financial benchmarks, and the energy markets have responded well to these guidelines, which are considered to have introduced sensible and realistic standards. Given the work of IOSCO, it seems unfortunate that the European Commission does not simply leave the markets to work with these guidelines.

Whether the European Commission's current proposals in relation to the Benchmark Regulation are brought into effect in due course or not, a significant

deterrent to market manipulation will have been introduced from July 2016 when the Market Abuse Regulation is implemented. Through this regulation, it will become a market abuse offence to manipulate benchmark rates (including in relation to commodities). The UK civil market abuse regime will also be extended to cover products traded on Multilateral Trading Facilities and Organized Trading Facilities. These reforms should, in turn, provide regulators with sufficient additional tools in order to tackle market abuse and market manipulation in the energy markets. The Market Abuse Regulation in itself may therefore provide a more effective tool for managing the risk of manipulation than the current proposals for a Benchmark Regulation, which could in fact result in the energy markets being damaged by creating distorted and unreliable prices.





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## CONTRIBUTORS TO THIS ISSUE

**Liz Bossley** is CEO of the Consilience Energy Advisory Group Ltd

**Peter Caddy** is Head of Global Development at Argus Media Ltd

**Jonathan Farrimond** is Senior Compliance Officer at the CME Group

**Neil Fleming** is an independent energy and commodities market consultant. The former Global Editorial Vice-President of Platts, and former Head of Content for ICIS, he currently works as Strategic Advisor to ICIS and as an associate consultant for African energy market specialists CITAC

**Graham Francis** is Managing Director of ICAP's Commodities business in EMEA

**Jonathan Hill** is a regulatory compliance specialist at BP

**Orçun Kaya** is Economist at the Banking, Financial Markets, and Regulation team of Deutsche Bank Research. Deutsche Bank AG

**Marco Kerste** is head of Financial Markets and Finance at SEO Amsterdam Economics, an independent research organization affiliated with the University of Amsterdam

**Ben Pott** is Head of European Affairs, ICAP

**Peter Stewart** is the owner of Pricing Energy Ltd, a consulting and training company focused on the pricing of oil, gas and other sources of energy.

He worked as Director of markets and pricing at Platts until 2007.

**Ian Taylor** is President & CEO of Vitol

**Bert Tieben** is head of Competition and Regulation Policy at SEO Amsterdam Economics, an independent research organization affiliated with the University of Amsterdam

**Andrew Tuson** is Senior Associate at Berwin Leighton Paisner LLP

**Andreas Walstad** is EU Policy & Regulation Editor for Interfax Global Energy, the publisher of Natural Gas Daily and Global Gas Analytics

**Paul Wightman** is Director, Research and Product Development, at the CME Group



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A RECOGNIZED INDEPENDENT CENTRE OF THE UNIVERSITY OF OXFORD



57 Woodstock Road Oxford OX2 6FA

**Direct Line:** +44 (0)1865 889136

**Reception:** +44 (0)1865 311377

**Fax:** +44 (0)1865 310527

**www.oxfordenergy.org**

EDITOR: **Bassam Fattouh**

CO-EDITOR: **Peter Stewart**

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