

Principles for the Regulation and Supervision of Commodity Derivatives Markets

Final Report



IOSCO

**The Board
OF THE
INTERNATIONAL ORGANIZATION OF SECURITIES COMMISSIONS**

FR02

JANUARY 2023

Copies of publications are available from:
The International Organization of Securities Commissions website www.iosco.org
© *International Organization of Securities Commissions 2023. All rights reserved. Brief excerpts may be reproduced or translated provided the source is stated.*

Foreword

The Board of the International Organization of Securities Commissions (IOSCO) has published this Final Report with the aim of reflecting the changes and developments in the commodity derivatives markets since the publication of the existing IOSCO Principles for the Regulation and Supervision of Commodity Derivatives Markets in 2011.

Contents

Chapter 1 Introduction	1
A. Prior IOSCO Work	1
B. The Principles Build Upon and Expand the Tokyo Communiqué Benchmarks	3
C. Evolving Markets and Legislation Prompted the Need for Expanded Principles - Background for 2011 Principles.....	3
D. 2022 Update of the Principles - Background for Revisions	5
E. Application of the Principles During Extraordinary and Unexpected Disruptions.....	7
Chapter 2 Statement of Intent	9
A. Authority, Process and Level of Supervision.....	9
B. Applicable Commodity Derivatives Contracts.....	9
C. Relevant IOSCO work since the publication of the Principles and Other Structural Measures	10
Chapter 3 Principles for the Design and Review of Physical Commodity Derivatives Contracts	12
A. Introduction.....	12
B. Principles for the Design and Review of Physical Commodity Derivatives Contracts.....	13
Chapter 4 Principles on Data and Market Transparency	24
A. Introduction.....	24
B. Principles on Data and Market Transparency	24
Chapter 5 Principles for the Surveillance of Commodity Derivatives Markets	32
A. Introduction.....	32
B. Principles for the Surveillance of Commodity Derivatives Markets	33
Chapter 6 Principles to Address Disorderly Commodity Derivatives Markets	46
A. Introduction.....	46
B. Principles to Address Disorderly Commodity Derivatives Markets.....	47
Chapter 7 Principles for Enforcement and Information Sharing	55
A. Introduction.....	55
B. Principles for Enforcement and Information Sharing.....	55
Chapter 8 Principles on Technological Developments in Commodity Derivatives Markets	66
A. Introduction.....	66
B. Principles on Technological Developments in Commodity Derivatives Markets	66
Chapter 9 Principle on Promotion of Investor Education and Awareness	70
A. Introduction.....	70
B. Principle on Promotion of Investor Education and Awareness	70
Chapter 10 - Conclusion	72
Appendix A - Summary of the Principles (without footnote citations)	74
Appendix B - Glossary of Terms	81
Appendix C – Comparison Table, Original Principles vs Revised Principles	85

Chapter 1 Introduction

IOSCO has undertaken work to gain a better understanding of recent developments in the commodity derivatives markets and to update the existing IOSCO Principles for the Regulation and Supervision of Commodity Derivatives Markets (Principles) to ensure these changes are appropriately addressed by the Principles. The 2022 revision of the Principles reflects these changes.

The original Principles were published in September 2011 in response to the G-20¹ Leaders' 2010 Seoul Declaration for further work on regulation and supervision of the commodity derivatives markets.² The Principles built upon the 1997 Tokyo Communiqué, which was the first internationally accepted guidance for contract design, market surveillance, and information sharing for the commodity futures market.³ The aim of the Principles is to ensure that the commodity derivatives markets serve their fundamental functions of facilitating price discovery and hedging, while remaining free from manipulation and abusive practices.

A. Prior IOSCO Work

IOSCO's work has been emphasized repeatedly by the G-20. At its Paris meeting in February 2011, the G-20 finance ministers and central bank governors stated that they looked forward to receiving IOSCO's recommendations "on regulation and supervision of commodity derivatives markets notably to strengthen transparency and address market abuse."⁴ Continued price

¹ The Group of Twenty (G-20) Finance Ministers and Central Bank Governors was established in 1999 to bring together systemically important industrialized and developing economies to discuss key issues in the global economy. The inaugural meeting of the G-20 took place in Berlin, on December 15-16, 1999, hosted by German and Canadian finance ministers. <https://www.g20.org/about-the-g20.html>

² See the *G-20 Seoul Summit Leaders' Declaration* (November 11-12, 2010). "Further work on regulation and supervision of commodity derivatives markets: We called especially on IOSCO's taskforce on commodity futures markets to report to the FSB for consideration of next steps in April 2011 on its important work", para 11, available at <http://www.g20.utoronto.ca/2010/g20seoul.pdf>

³ In November 1996, following the revelations of huge losses at Sumitomo and the related adverse effects on the global copper markets, the CFTC and the UK Securities Investment Board, along with the relevant Japanese authorities, the Ministry of International Trade and Industry (MITI) and the Ministry of Agriculture, Forestry and Fisheries (MAFF), co-sponsored an international regulators' conference in London on physical delivery markets in international commodities. The London conference focused on the special problems that physical delivery markets pose for regulators and considered how contract design, market surveillance and international information sharing can reduce the potential for, and assist in the management of, manipulation and other market disruptions. The 17 countries participating in that meeting issued a *Communiqué* agreeing on certain basic Principles of regulation and on a year-long work program.

That effort culminated on October 30 and 31, 1997. Representatives of regulators from 16 jurisdictions responsible for supervising commodity futures markets participated in a conference in Tokyo, Japan, jointly chaired by the CFTC, the Japanese MITI and MAFF and the UK FSA, and announced the completion of the work program contained in the London *Communiqué* issued in November 1996. At the end of the meeting, the regulators issued a communiqué (the Tokyo *Communiqué*) which, among other things, endorsed two guidance papers, one on best practices for the design and/or review of commodity contracts and another on market surveillance and information sharing. The guidance's represent the first occasion on which regulators responsible for overseeing commodity derivatives markets have agreed to international standards for the supervision of these markets. See Tokyo *Communiqué* at: <http://www.meti.go.jp/policy/commerce/intl/tkyc.pdf>

⁴ See *Communiqué Meeting of Finance Ministers and Central Bank Governors*, Paris, 18-19 February 2011, available at: <http://www.g20.utoronto.ca/2011/2011-finance-110219-en.html>

pressures on commodities led the G-20 Ministers at their meeting in Washington, D.C. in April 2011 to stress “the need for participants on commodity derivatives markets to be subject to appropriate regulation and supervision”.⁵ The G-20 Ministers reiterated their call “for enhanced transparency in both cash and derivatives markets as previously recommended by IOSCO” and “asked IOSCO to finalize, by September 2011, its recommendations on regulation and supervision in this area especially to address market abuses and manipulation, such as through position management powers, including the authority to set ex-ante position limits where appropriate, among other powers of intervention.”

The original 2011 Principles were in response to global concerns, including those voiced by the G-8 Finance Ministers, concerning oil price volatility. Responding to these concerns, IOSCO initially issued a report in March 2009⁶ containing recommendations for improving commodity derivative regulation by securities and futures regulators. The G-20 Leaders endorsed these March 2009 recommendations in their September 2009 Pittsburgh Leaders’ Statement and called on IOSCO to collect more oil market data and requested further recommendations on ways to reduce volatility in energy prices. That workstream resulted in reports by IOSCO to the G-20 in June and November 2010, respectively, an IOSCO Report in June 2010, and a report to the Financial Stability Board in April 2011.⁷ Subsequently, G-20 Agriculture Ministers committed to share reliable data on agricultural markets in order to increase market information and transparency; they asked for an enhanced collaboration between physical and financial regulators⁸ and invited IOSCO to make concrete recommendations in their forthcoming report in order to ensure a better functioning of, and more transparent, agricultural financial markets.⁹

⁵ See *Communiqué Meeting of Finance Ministers and Central Bank Governors*, Washington, DC, 14-15 April 2011, available at: <http://www.g20.utoronto.ca/2011/2011-finance-110415-en.html>

⁶ See *Task Force on Commodity Futures Markets*, Report of the Technical Committee of IOSCO, March 2009 available at: <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD285.pdf>.

⁷ See *ibid.*

See *OR01/11 Task Force on Commodity Futures Markets Report to the Financial Stability Board*, Report of the Technical Committee of IOSCO 15 April 2011, available at: <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD352.pdf>;

See *OR08/10 Task Force on Commodity Futures Markets Report to the G-20*, Report of the Technical Committee of IOSCO, 1 November 2010), available at: <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD340.pdf>;

See *Task Force on Commodity Futures Markets Report to the G-20*, Report of the Technical Committee of IOSCO, 23 June 2010, available at: <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD324.pdf>; and

See *Task Force on Commodity Futures Markets Survey*, Report of the Technical Committee of IOSCO, 23 June 2010, available at: <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD325.pdf>.

⁸ The G-20 Agriculture Ministers declaration “*Action Plan for Food price volatility and agriculture*”, Paris, 22-23 June 2011 available at: <https://www.oecd.org/g20/topics/agriculture-food-security/2011-06-23 - Action Plan - VFinale.pdf> “We decide to launch the Agricultural Market Information System (AMIS) in order to encourage major players on the agri-food markets to share data, to enhance existing information systems, to promote greater shared understanding of food price developments... We emphasize that AMIS will enable financial actors and market regulators to be better informed of the fundamentals of physical markets. A better collaboration between authorities, regulators and bodies responsible for agriculture physical and financial markets will improve regulation and supervision of markets.”

⁹ *Ibid.*: “We welcome the forthcoming work of International Organization of Securities Commissions (IOSCO) based on the set of concrete measures mentioned in its report to ensure a better functioning and more

B. The Principles Build Upon and Expand the Tokyo Communiqué Benchmarks

IOSCO took as its starting point the benchmarks for contract design, market surveillance and information sharing that were set out in the Tokyo Communiqué in 1997. The Tokyo Communiqué standards constituted the first set of internationally accepted guidance for contract design and market surveillance and information sharing for physical commodity futures markets. The Tokyo Communiqué focused specifically on physical commodity futures markets because contracts that are based on an underlying tangible commodity, whether settled in cash or by delivery of a physical commodity, may have characteristics different from futures based on underlying financial instruments. This is particularly the case where supply is limited.

The Tokyo Communiqué guidance was intended to serve as a standard against which Market Authorities, as defined in Chapter 2.A below, could voluntarily benchmark their own supervisory programs. IOSCO endorsed generally the Tokyo Communiqué on two occasions. In 1998, IOSCO reviewed the Tokyo Communiqué for the purpose of determining whether the surveillance and design guidance could be applied to exchange-traded derivatives that are not based on a physical underlying commodity. IOSCO endorsed generally the usefulness of the contract design and surveillance guidance contained in the Tokyo Communiqué to all exchange-traded futures, options on futures and options contracts on all types of derivatives.¹⁰ IOSCO's 2009 report similarly concluded that the Tokyo Communiqué "continues to provide a comprehensive guidance that can assist Market Authorities in building an effective market integrity program."¹¹

C. Evolving Markets and Legislation Prompted the Need for Expanded Principles - Background for 2011 Principles

Notwithstanding the continued applicability of the Tokyo Communiqué design, market surveillance and information sharing guidance, since 1997 IOSCO has added to these areas of guidance to take into account their domestic supervisory experience and their judgments as to what broad policies are needed to respond to contemporary trends in commodity derivatives markets. These trends were related to the scale, speed and cross-border nature of trading on contemporary commodity derivatives markets, regulators' experience in addressing novel forms of market abuses, the focus by investors on commodities as an asset class and concerns about the impact of those new investor classes on physical commodity prices, and the rapidly evolving regulation of over-the-counter (OTC) derivatives markets:

- **Electronic trading** – Most derivatives exchanges are electronic, thus providing direct access to participants that may be located anywhere on the globe.¹² Trading may be guided automatically by algorithms and, depending on the strategy, at high frequency

transparent agricultural financial markets (including over-the-counter derivatives), to prevent and to address market abuses, cross-market manipulations and disorderly markets."

¹⁰ See *The Application of the Tokyo Communiqué to Exchange-Traded Financial Derivatives Contracts*, Report of the Technical Committee of IOSCO, September 1998, available at: <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD85.pdf>.

¹¹ See *Task Force on Commodity Futures Markets*, IOSCO, March 2009, p.14, fn 6.

¹² While most derivatives exchanges are electronic, many of the largest markets in OTC derivatives as operated by relatively newer types of trading venues (e.g., organized trading facilities, swap execution facilities) still transact via voice trading or voice-hybrid trading – which is a combination of voice and electronic trading.

in speeds measured in microseconds. The scale and speed of trading require surveillance authorities to monitor and analyze millions of transactions daily in order to detect possible abusive trading schemes.¹³ Effective surveillance cannot be accomplished without appropriate technology, including sophisticated programs that are capable of detecting patterns within these large volumes of data. Automated surveillance systems that can monitor and analyze order flow as well as intra-day transactions that can take place in a matter of microseconds along with information on end-of-day positions are critical to an effective surveillance program.

- ***Information needs in a global market*** - The globally-dispersed nature of markets and market participants requires enhanced forms of sharing relevant information among Market Authorities. The scale of global trading and the availability of increasing volumes of data made available electronically require Market Authorities to define with precision the circumstances that justify the sharing of information to support their market surveillance operations and to develop arrangements that implement such necessary surveillance.
- ***Multi-market trading abuses*** - Regulators have encountered abusive trading practices that involve trading not only in the futures market but also involve OTC physical commodity derivatives markets and/or the underlying physical commodity. Such practices require an appropriate Market Authority to put into place a robust surveillance and enforcement structure that is designed not only to have the powers and techniques to address abusive conditions affecting individual markets, but also to actively detect and respond to abusive trading practices that might involve interaction between multiple markets.
- ***The impact of futures trading on physical commodity markets*** - The *financialization* of global commodity futures markets (i.e., the increased role of commodities as an asset class for investors), has contributed to growing trading volumes. This has raised questions whether such *financialization* has improved price discovery or whether the increased investment into derivatives markets has contributed to price and volatility surges in the futures markets that affect the underlying commodity markets.¹⁴
- ***Expanding Regulation of OTC Derivatives Markets*** – The implementation of the G-20 commitments to regulatory reform regarding OTC derivatives (G-20 Commitments)

¹³ These evolving markets structures are not, of course, unique to physical commodity derivatives markets. For a discussion of IOSCO's response to these evolving market structures, see the consultation report *CR02/11 Regulatory Issues Raised by the Impact of Technological Changes on Market Integrity and Efficiency*, Report of the Technical Committee of IOSCO, 6 July 2011, available at: <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD354.pdf>.

¹⁴ Ibid. at pp. 88-92. In this regard, the Task Force's 2009 review of available literature led it to conclude that existing economic research "[did]" not support the proposition that the activity of speculators has systematically driven commodity market cash (physical) or futures prices up or down on a sustained basis. The Task Force recognized, however, that there was continuing controversy surrounding the interaction between futures market trading and underlying commodity market prices and that such research was subject to data limitations.

As a practical matter, therefore, the Task Force focused its work on recommendations that were intended to improve the transparency and functioning of commodity futures markets. See summary of Task Force work in OR01/11 *Task Force on Commodity Futures Markets - Report to the Financial Stability Board*, 15 April 2011. Fn 7.

substantially brought formerly opaque instruments into greater regulatory oversight. Since 2009, these reforms required IOSCO members, markets and self-regulatory organizations (SROs) to adapt their regulatory and supervisory practices to these new products and trading facilities.

- ***Ensuring an appropriate regulation of market participants*** - Some major participants in commodity derivatives markets (e.g., electricity and natural gas producers and distributors, traders specializing in commodities, etc.) legitimately operated outside the purview of financial regulation. This approach has been based on a reviewed assessment of these participants' systemic risk and on the premise that many of them trade only for their own account. It is however critical to keep the scope of financial regulation regularly under review as markets develop to ensure that participants in derivatives markets are appropriately regulated and a further review may be appropriate.

Implementation Reviews of the 2011 Principles

Following the publication of the Principles in 2011, IOSCO undertook three implementation reviews: in 2012,¹⁵ 2014,¹⁶ and 2018,¹⁷ in response to the G-20 request. These reviews reflected an increasing level of implementation of the Principles by IOSCO member jurisdictions.

D. 2022 Update of the Principles - Background for Revisions

Evolving Markets and Trends That Prompted the Need for Updated Principles

While the Principles reflected the characteristics of commodity derivatives markets at the time that they were produced, these markets have continued to evolve over the past decade. Since publication of the original 2011 Principles, the commodity derivatives markets have evolved especially with respect to several recent trends and changes within the market itself and broader external influences, including: regulatory reforms, data, technology, product development, and societal factors. These recent developments merited further analysis to ensure that the Principles continue to provide a resilient framework for the regulation and oversight of the commodity derivatives markets.

Therefore, IOSCO's Committee 7 on Derivatives¹⁸ has conducted a review of recent developments in the commodity derivatives markets to provide a revised version of the Principles to ensure that the Principles appropriately reflect such developments.

IOSCO has identified examples of specific recent and evolving developments in commodity derivatives markets that merit attention, such as:

- ***Emergence of additional types of trading venues*** – The goals of the G-20 reforms

¹⁵ [Survey on the Principles for the Regulation and Supervision of Commodity Derivatives Markets.pdf](#)

¹⁶ Available at: [FR06/2014 Update to Survey on the Principles for the Regulation and Supervision of Commodity Derivatives Markets \(iosco.org\)](#)

¹⁷ Available at: [Update to Survey on the Principles for the Regulation and Supervision of Commodity Derivatives Markets \(iosco.org\)](#).

¹⁸ Committee 7 on Derivatives was formed in 2017 by merging the former IOSCO Committee on Commodity Derivatives and the IOSCO OTC Derivatives Task Force.

include increasing transparency, competition, and efficiency in trading in the derivatives market. Since publication of the Principles and further implementation of regulatory reforms, new types of trading venues have emerged, such as Swap Execution Facilities and Organized Trading Facilities. To reflect this development, for purposes of this report and the related principles, references to exchanges and trading platforms include such trading facilities.¹⁹

- ***Adoption of Principles for Oil Price Reporting Agencies*** – Price reporting agencies (PRAs) report transaction and benchmark prices in both the physical and commodity derivatives markets. In October 2012, IOSCO adopted the Principles for Oil Price Reporting Agencies. Though those principles were developed in the context of PRAs and oil derivatives markets, they are also useful in more general application to any commodity derivatives contract that references a PRA-assessed price, regardless of the nature of the underlying commodity.
- ***Use of direct electronic access by end-users*** – Direct access by non-financial end-users to trading of commodity derivatives, thus bypassing intermediaries, could benefit such end-users as well as the broader market by increasing market efficiency, lowering transaction costs, and promoting participation and competition. However, increasing availability and use of such direct access may raise concomitant issues and risks not otherwise addressed in the Principles.
- ***Reliance on electronic data*** – With timing of financial decisions becoming extremely crucial, the need for accurate, reliable, and real-time data has gained much more importance in recent past. Globalization is increasingly becoming about free flow of data and information. Reliance on such data which has a direct bearing on the pricing of commodities in spot and derivatives market is a development which should be reflected in the Principles. Conversely, reliance on electronic data and the increase in automation has the effect of increasing data and technology security risk and

¹⁹ In the IOSCO Report on Trading of OTC Derivatives (February 2011), the Task Force on OTC Derivatives Regulation concluded that in implementation of the G-20 commitment to trade all standardized OTC derivatives on exchanges or electronic platforms, “it is appropriate to trade standardized derivatives contracts with a suitable degree of liquidity on ‘exchanges or electronic trading platforms, provided that a flexible approach encompassing a range of platforms that would qualify as ‘exchanges or electronic trading platforms’ for derivatives trading is taken.” Further, that a flexible approach to defining “exchanges or electronic trading platforms” should be taken and not limited to any single trading mechanism or model. See <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD345.pdf>.

While most derivatives exchanges are electronic, many of the largest markets in OTC derivatives as operated by relatively newer types of trading venues (e.g., organized trading facilities, swap execution facilities) still transact via voice trading or voice-hybrid trading – which is a combination of voice and electronic trading.

A follow up report, Follow-On Analysis to the Report on Trading of OTC Derivatives (January 2012), examines different types of trading platforms, including swap and security-based swap execution facilities (collectively, SEFs) and organized trading facilities (OTFs). SEFs include trading systems or platforms in which multiple participants have the ability to execute or trade swaps by accepting bids and offers made by multiple participants in the system. OTFs are defined as a system or facility (which is not a Regulated Market or Multilateral Trading Facility) operated by an investment firm or a market operator, in which multiple third-party buying and selling interests in financial instruments are able to interact in the system in a way that results in a transaction.

See: <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD368.pdf>.

operational resilience as the sophistication and speed of electronic trading and data may increase concentration risk and loss of control and supervision over certain tasks.²⁰

- ***Increasing importance of sustainability factors in investment decisions***
Sustainability factors, including economic, social development, and environmental protection, are becoming more prevalent and influential considerations for investors, and have led to the development of new investment products and growth in related commodity products such as biofuels and environmental attributes. As this perspective continues to develop, it should be considered in the commodity derivatives markets.
- ***Increasing role of exchange traded products (ETPs²¹)*** –The market volatility in March-April 2020 at the beginning of the COVID-19 pandemic in the commodity markets has reverberated throughout the ETP sector and highlighted a number of investor protection concerns. While this volatility was not unique to the ETP sector, the Principles, in conjunction with the IOSCO Principles for the Regulation of Exchange Traded Funds, should recognize the increasing volume and role of ETPs in the commodity and commodity derivatives markets.
- ***Potential impact of novel and unexpected disruptions*** – The global pandemic related to COVID-19 is the most recent example of an unexpected event that can disrupt trading markets, including the commodity and commodity derivatives markets. Market Authorities have processes in place to address known operational risks and issues relating to the functioning of regulated markets. However, unexpected disruptions can have unknown and potentially significant impacts on the proper functioning of the commodity derivatives markets.

Additionally, external disruptive events beyond market dynamics created spikes in oil prices in recent years. Although such spikes were rapidly absorbed and commodity derivatives markets normalized, these incidents raised concerns about the ability of commodity markets to interact with external shocks. IOSCO considered the role of commodity derivatives markets in mitigating the impact of such external physical market events, and whether and to what extent the Principles might be relevant in addressing such situations.

E. Application of the Principles During Extraordinary and Unexpected Disruptions

There have been incidents in recent years that are extraordinary/unexpected disruptions in terms of their impact on commodity derivatives markets, including price volatility and margin implications. Examples of such disruptions include: (a) geopolitical tensions leading to war; (b) terrorist attacks; and (c) trading disruptions due to excessive price volatility, which may stem from geopolitical tensions, that the price control mechanisms in place were unable to mitigate.

In such scenarios, commodities tend to be more volatile than any other asset class. Exogenous shocks, accompanied by commodity specific factors, such as geopolitical risks (critical commodities being extracted in certain parts of the world), nature/environmental factors and physical delivery impediments, may result in extreme volatility, particularly in critical energy/commodity markets and lead to margin spikes and liquidity strain on energy firms and commodity traders. Additionally, there may be various intrinsic factors driving liquidity (or

²⁰ See IOSCO Principles on Outsourcing at: <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD687.pdf>

²¹ ETPs in commodity markets include ETFs, Unit Investment Trusts, Exchange Traded Notes, trusts and limited partnerships, the latter of which make up the majority of commodity pools.

illiquidity) in commodity derivatives, which may include physical delivery limitations and other external factors, such as: potential for international sanctions at any time during a contract's tenure; possible restrictions to make or take payment in certain currencies; inability to arrange for tankers due to absence of insurance coverage; and difficulty in taking on board the cargos, all of which can exacerbate market volatility. Uncertainty by market participants over delivery points that have been rendered unavailable due to war or terrorist attacks may introduce additional stress.

Furthermore, participants in commodity markets may hold positions in exchange, OTC and physical markets. This unique characteristic of commodity markets may have implications for price formation and market volatility. It also increases the risk of market abuse. It may be challenging for regulators to identify large positions and concentrations, particularly in times of market stress due to extraordinary disruptions. Access to data on the underlying physical market may give regulators a better picture of large positions and risk concentration.

The Principles provide adequate guidance to mitigate some of the extreme price volatility in the case of extraordinary disruptions. Furthermore, a new Principle (Principle 16 on Unexpected Market Disruptions) has been added to the Principles. The Principles state that the relevant Market Authority should have adequate arrangements in place due to extraordinary disruptions such as war, which may include providing alternative delivery points for physically settled commodity derivatives. To the extent possible, dissemination of such information should be provided ahead of time and understood by market participants, assisting in the mitigation of stress around delivery point failure.

Additionally, extraordinary disruptions due to position imbalances resulting in excessive price volatility also increase uncertainty with the potential for disorderly markets. Disorderly markets may result in market disruption and pose systemic risk. Relevant Market Authorities may impose a suspension or cancellation of trades due to disorderly markets. Where circumstances permit, the factors and conditions leading to suspensions and cancellations should be well understood in advance of those events by market participants. Market Authorities should consider taking appropriate measures to maintain an orderly market and safeguard investors' interests, while at the same time taking steps to avoid incentivizing higher risk-taking by market participants in anticipation of possible future market suspensions. The Principles recommend implementing maximum price fluctuations and position limits to help mitigate excessive price volatility and provide time for market participants to arrange necessary financing, in addition to allowing time for price movements to be fully understood by all market participants.

One of the core objectives of the Principles is to ensure proper conduct in commodity derivatives markets and avoid abusive trading practices, particularly manipulation. It should be noted however that, it continues to be challenging to design a regulatory regime for commodity derivatives markets that appropriately considers the difference in structure and practices of the underlying spot market, the diversity of market participants and the different purposes for their participation in these markets. Therefore, the Principles should be implemented with due consideration to the jurisdictional specificities of the underlying market.

Chapter 2 Statement of Intent

The revised 2022 Principles (hereinafter the Principles) help to ensure that the physical commodity derivatives markets serve their fundamental price discovery and hedging functions, while operating free from manipulation and abusive trading schemes. The Principles are not intended to address absolute price levels or price volatility in an underlying physical commodity. In this regard, fundamental factors such as fires, floods, droughts, embargos, civil unrest, global pandemics, change in law or export restrictions can have a substantial impact on supply and demand for physical commodities and in turn the prices for a physical commodity. The prices formed in commodity derivatives markets take into consideration, among other things, the potential effects of and changes to such fundamental factors.

The Principles set out in this report should be read in light of the following:

A. Authority, Process and Level of Supervision

Unless otherwise specifically noted, the term “Market Authority” used in the Principles means the relevant governmental regulator, an SRO or operator of the regulated market. This broad definition is used in order to accommodate the varied supervisory practices in use by IOSCO members. Accordingly, the Principles do not prescribe what type of Market Authority or combination of Authorities should be responsible for the regulation and supervision of commodity derivatives markets in a particular jurisdiction. Rather, the intent of these Principles is to ensure that the relevant Market Authority or Authorities take into account these Principles in exercising their regulatory and supervisory responsibilities. The identification of the relevant Market Authority depends on the regulatory and legal structure and may differ across jurisdictions.

B. Applicable Commodity Derivatives Contracts

1. Exchange-traded physical commodity derivatives

The Principles are intended to apply primarily to exchange-traded futures contracts, options on futures contracts and options, for which the underlying reference interest is a physical commodity or physical commodity index or price series and which may settle in cash or by physical delivery. These commodity *derivatives* instruments should be distinguished from transactions in the actual underlying physical market for commodities.

Although, in some cases, the Principles could also be applied to contracts where the underlying interest is a financial instrument²² or an intangible (e.g., carbon credits). The Principles are directed to contracts based on a physical commodity or a non-financial deliverable with finite supply.²³ This Report recognizes how a particular trading product is characterized and how it is

²² Although IOSCO has determined previously that the Tokyo Communiqué’s Design Guidance is relevant to derivatives that reference a financial instrument, it cautioned that Market Authorities may need to place different emphasis on specific issues (such as delivery characteristics or cash settlement terms). See *The Application of the Tokyo Communiqué to Exchange-Traded Financial Derivatives Contracts*, September 1998, fn 13. Accordingly, this Guidance has not considered any derivatives that are based upon a financial instrument.

²³ See *Tokyo Communiqué on the supervision of commodity futures markets*, 1997, available at: <http://www.meti.go.jp/policy/commerce/intl/tkyc.pdf>, at Introduction (fn.1 and fn.2) and Design Guidance Annex “A” (fn.2).

determined by a jurisdiction's national legislation.

2. OTC physical commodity derivatives

The Principles for surveillance, disorderly markets, enforcement and information sharing and enhancing price discovery are generally applicable to a relevant Market Authority's oversight of OTC physical commodity derivatives markets. For example, the Principles for surveillance require that a relevant Market Authority be able to access OTC commodity derivatives data under certain circumstances in relation to its oversight of an organized futures market. Although elements of the Principles for contract design are *instructive* to a designer of OTC derivatives, the contract design Principles are not intended to apply as such to OTC commodity derivatives.

The original 2011 Principles were issued at a time of ongoing developments with respect to OTC derivatives regulation. Although the extent of implementation of the G-20 Commitments on OTC derivatives varies substantially across jurisdictions, major implementation reforms are already in place today.

C. Relevant IOSCO work since the publication of the Principles and Other Structural Measures

IOSCO published important reports since the publication of the Principles in 2011, on various topics, including OTC derivatives, financial market infrastructures²⁴ and (with the Committee on Payment and Settlement Systems-CPSS, now Committee on Payment and Market Infrastructures-CPMI) that relate to the 2022 revisions. These reports include the following:

- CPMI-IOSCO Principles for Financial Market Infrastructures²⁵
- Report on OTC Derivatives Data Reporting and Aggregation Requirements²⁶
- International Standards for Derivatives Market Intermediary Regulation²⁷
- Principles for the Regulation of Exchange Traded Funds²⁸
- Technological Challenges to Effective Market Surveillance Issues and Regulatory Tools²⁹
- Principles for Oil Price Reporting Agencies³⁰

²⁴ FR03/11 *Report on Trading of OTC Derivatives*, Report of the Technical Committee of IOSCO, 18 February 2011, available at <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD345.pdf>

²⁵ Report on *Principles for Financial Market Infrastructures*, April 2012, available at: <https://www.bis.org/cpmi/publ/d101a.pdf>

²⁶ Report on *OTC Derivatives Data Reporting and Aggregation Requirements*, January 2012, available at: <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD366.pdf>

²⁷ Report on *Derivatives Market Intermediary Regulation*, June 2012, available at: <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD381.pdf>

²⁸ Report on *Principles for the Regulation of Exchange Traded Funds*, June 2013, available at: <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD414.pdf>

²⁹ Report on *Technological Challenges to Effective Market Surveillance Issues and Regulatory Tools*, August 2012, available at <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD389.pdf>

³⁰ Report on *Principles for Oil Price Reporting Agencies*, October 2012, available at: <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD391.pdf>

- Sustainable Finance and the Role of Securities Regulators and IOSCO³¹
- Mechanisms Used by Trading Venues to Manage Extreme Volatility and Preserve Orderly Trading³²
- Report on Trading of OTC Derivatives³³
- Mechanisms for Trading Venues to Effectively Manage Electronic Trading Risks and Plans for Business Continuity³⁴
- Commodity Storage and Delivery Infrastructures: Good or Sound Practices³⁵

These major OTC derivatives national reforms and multilateral work-streams require IOSCO members to construct regulatory and supervisory policies to address the particular state of development of OTC derivatives infrastructure within their jurisdiction. Accordingly, the extent to which the Principles can be specifically applied to OTC physical commodity derivatives and OTC physical commodity derivatives that will be executed on an electronic trading or execution facility in a particular IOSCO member's jurisdiction will depend upon the legislation and OTC derivatives infrastructure in a particular IOSCO member's jurisdiction.³⁶

This Report should be read in conjunction with other Principles and guidance developed by IOSCO, such as the IOSCO Objectives and Principles of Securities Regulation (IOSCO Principles), in particular the Principles on Secondary Markets and the related Assessment Methodology, which set out Principles and guidance of general application to all markets, as well as the above-mentioned IOSCO Reports.

³¹ Report on *Sustainable Finance and the Role of Securities Regulators and IOSCO*, April 2020, available at: <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD652.pdf>

³² Report on *Mechanisms Used by Trading Venues to Manage Extreme Volatility and Preserve Orderly Trading*, March 2018, available at: <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD594.pdf>

³³ Report on *Trading of OTC Derivatives*, February 2011, available at: <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD345.pdf>

³⁴ Report on *Mechanisms for Trading Venues to Effectively Manage Electronic Trading Risks and Plans for Business Continuity*, December 2015, available at: <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD522.pdf>

³⁵ Report on *Commodity Storage and Delivery Infrastructures: Good or Sound Practices*, February 2019, available at: <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD622.pdf>

³⁶ Any determination to assess a jurisdiction's compliance with these Principles must take into account that, assessment officials must recognize that even where OTC derivatives legislation is adopted, there must be careful development of implementing regulations and policies to integrate OTC derivatives into a Market Authority's overall regulatory and supervisory approach. The assessment must also take into account the functional differences between derivatives and equity securities, as well as the particular statutory treatment accorded to those instruments in a particular jurisdiction. They should also take into account the size, structure and complexity of the relevant market.

Chapter 3 Principles for the Design and Review of Physical Commodity Derivatives Contracts

A. Introduction

In contrast to decentralized markets, organized commodity derivatives markets provide enhanced price transparency and liquidity, and eliminate credit risk between counterparties when trades are cleared by a central counter-party (CCP). These attributes of organized exchanges, such as futures exchanges, are feasible because the contracts are standardized. Some of the principal economic purposes of organized trading of commodity derivatives such as futures contracts are to manage price risk and facilitate the discovery of possible future commodity prices and prices for storage and delivery infrastructure. To be an effective economic tool for hedging and price discovery, commodity futures contracts must accurately reflect the characteristics and operation of the referenced underlying physical commodity market, and not contain factors which may inhibit or bias the delivery process.

Where contract terms are not consistent with commercial practices or the delivery process is biased in favor of either participant, the contract may not be commercially successful, or it may be susceptible to market abuses or manipulation and contribute to price distortion and disorderly markets. A non-robust contract design may lead to a lack of price convergence between a commodity futures contract and the referenced underlying physical commodity at the expiration of the contract. As a result, the contract is of less use as a hedging tool and could even multiply risk by doubling positions, rather than offsetting them.

A key objective of the contract design Principles is to eliminate, to the extent possible, the susceptibility of the futures contract to price manipulation or distortion. However, even well-designed contracts can be subject to manipulation or price distortion, which may result from schemes involving different types of commodity markets, both derivatives markets (e.g., futures and OTC derivatives) and physical commodity markets. Therefore, although contract design principles are a critical element of derivatives market integrity, they should be viewed as a complement to and not a substitute for appropriate market surveillance and enforcement programs.

The following contract design Principles have been drafted to apply principally to futures contracts, options on futures contracts, and options, for which the underlying reference interest is a physical commodity or physical commodity index or price series and which settle in cash or by physical delivery. For convenience, the text refers primarily to futures contracts.

Although elements of the contract design Principles may be instructive to the designers of bespoke OTC commodity derivatives or to *standardized* OTC derivatives that will be executed on an electronic execution facility, they are not intended to apply as *Principles* to such contracts. A bespoke OTC derivative and a *standardized* OTC derivative, required under the relevant Market Authority's relevant legislation to be executed on an electronic trading facility, would not necessarily incorporate all of the characteristics of a futures contract and may not be designed to trade actively like futures contracts.

Relevant Market Authorities are likely to find elements of the contract design *Principles* to be more relevant to any such contracts that are designed to have standardized, futures-like characteristics, and, if executed on an electronic trading facility, begin to trade actively like a

futures contract, serve a price discovery function and/or are linked to, or otherwise have an effect on, an exchange-traded futures contract.

B. Principles for the Design and Review of Physical Commodity Derivatives Contracts³⁷

These Contract Design Principles are intended to apply throughout the life of a commodity derivatives contract, from its initial listing onwards.

Principle 1: Accountability – *Relevant Market Authorities should establish a clear framework of criteria or procedures as to design and review of commodity derivatives contracts, ensuring that the relevant Market Authority retains powers to address or vary the provisions of contracts, which produce manipulative or disorderly conditions, or systemic risk. Relevant Market Authorities should be accountable for compliance with statutory and/or self-regulatory standards on a continuous basis.*

Irrespective of which entity designs and/or reviews a commodity derivatives contract, the framework governing such process should be clear, and the relevant Market Authority should be accountable on a continuing basis to comply with relevant standards set by the statutory or self-regulatory Market Authority.

At a minimum, a relevant Market Authority that exercises statutory powers should have the ability to address contract provisions which produce, or are deemed likely to produce manipulative or disorderly conditions or systemic risk, by intervention appropriate to the circumstances,³⁸ including the exercise of authority to vary contract provisions or suspend or even to terminate trading in a contract based on market integrity concerns.³⁹ These powers need to be clearly delineated by the relevant Market Authority so that market participants are able to understand the circumstances under which a contract term or condition could be modified. In respect of prospective application, and provided conditions permit, contract modifications or terminations (as different from trade cancellations) should not occur without sufficient time for market participants to adjust their trading processes.

Accountability implies more than the mere retention of necessary powers, by entailing a solid framework for the appropriate use of those powers. For example, the commercial practices in a physical commodity market are dynamic. Changes in those cash market practices that are no longer described by the commodity derivatives contract's terms and conditions could materially affect the utility of the contract as a hedging instrument and make it more susceptible to manipulation or disorderly conditions.

³⁷ Throughout this report, all of the *Principles* are denoted by italics, and followed immediately by text that is intended to highlight key issues that are related to the principle in question. The *Discussion* sections that generally follow provide further background and guidance to relevant Market Authorities.

³⁸ Actions affecting open positions see *Tokyo Communiqué Annex B Guidance on Components of Market Surveillance and Information Sharing*, fn 21, should be designed to minimize any impact on market operations.

³⁹ The relevant Market Authority will make this determination based on its assessment of need. For example, a continuing divergence between the futures settlement price and the underlying physical market price could, upon analysis, cause a relevant Market Authority to vary the terms of the future contract.

It follows that the relevant Market Authority that is responsible for the design of a commodity derivatives contract should have staff who continue to be aware of commercial practices in the physical commodity market that underlies a derivatives contract and who will recommend appropriate action if those practices vary from the initial terms and conditions of the derivatives contract. The relevant Market Authority should have clear guidelines concerning the circumstances that will trigger a reevaluation of a commodity derivatives contract's terms and conditions. In this regard, concerns expressed by commercial participants in the commodity derivatives contract should prompt a reevaluation of the contract's terms and conditions.

Principle 2: Economic Utility – *Relevant Market Authorities should ensure that contracts are designed to meet the risk management needs of potential users and promote price discovery of the underlying commodity. Relevant Market Authorities should be informed of contract characteristics and should review and/or approve the contract. Relevant Market Authorities should ensure that the views of participants in the commodity derivatives markets are taken into account in designing commodity derivatives contracts.*

The more accurately a commodity derivatives contract reflects the operation of the relevant underlying physical market, the greater the likelihood of its economic utility as a tool for hedging and price discovery. Consistent with the IOSCO Principles on Secondary Markets, the exchange's relevant regulator should, as a minimum requirement, be informed of the types of products to be traded on the exchange or trading system and should review or approve the rules governing the trading of the products. In doing so, the exchange and/or the regulator should consider contract design Principles, where applicable. To ensure a commodity derivatives contract reflects the underlying physical market, the Relevant Market Authority should consider contract designs that could mitigate unnecessary volatility, such as those set forth in the paper *Mechanisms Used By Trading Venues To Manage Extreme Volatility And Preserve Orderly Trading*.⁴⁰

The design and/or review of commodity derivatives contracts should include a determination that the contract can meet the risk management needs of potential users of the contract and/or promote price discovery of the underlying commodity. The determination of economic utility may be supported by surveys of potential contract users or may be implied - for example, from an analysis of the physical market.

The views of potential contract users, particularly commercial users, should be taken into account in the design of commodity derivatives contracts. For example, potential contract users may have special needs related to the size of the contract, the commodity grade or the conditions of delivery which, if addressed, could enhance the economic utility and commercial viability of a contract.

Ideally, markets themselves will have a commercial interest in the economic utility and viability of a contract. The regulatory interest is related to the commercial interest in that each seeks to ensure that the contract will not be readily susceptible to manipulation so as to ensure a well-functioning market.

⁴⁰ <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD607.pdf>

Discussion

No proven set of terms and conditions has been established that will ensure that a commodity derivatives contract on an underlying physical commodity will be commercially successful. A review of successful and properly functioning commodity futures contracts indicates certain physical market conditions that, if present, enhance the possibility that a particular physical market may support a properly functioning commodity derivative contract. These physical market conditions are as follows.

- *An active physical market should exist prior to the development of commodity derivative contracts.* Active physical commodity markets provide commodity derivatives markets with a large pool of potential commercial participants and transparent, reliable pricing.
- *Production and consumption of the commodity should be widely distributed among a large number of producers, merchants, and consumers.* The wide dispersal of production and consumption of the underlying commodity reduces the ability of any individual, or group acting in concert, to control the supply or demand for the commodity. For example, a large vertically integrated industry, which owns facilities for the mining of or drilling for a needed physical commodity, would have less need for a commodity contract.
- *An adequate supply of the commodity should be economically available (i.e., at an economically viable price) in the physical market to meet commodity market delivery needs at contract expiration.* Limitations on economically available supply of the commodity or commodities permitted to be delivered under the contract may result in market congestion, squeezes, corners or other disruptions if holders of short commodity contract positions cannot obtain the underlying commodity to satisfy their delivery obligations.
- *Price risk must be associated with the commodity in order to attract hedgers and speculators to a commodity market.* Commercial market participants (e.g., producers, merchants and consumers/users of a commodity) would have limited incentive to hedge against potential physical market price changes if such commodity prices were stable or could be reliably predicted. Commercial market participants are more likely to use commodity contracts to hedge against physical market price movements when such price movements can be material and unpredictable. The extent to which the supply, demand or price of a physical market commodity is stabilized by government or cartel regulation would be a significant factor in determining whether a commodity derivatives market is needed.

It is difficult to establish trading interest in a new commodity derivatives contract when producers, merchants, and consumers of a commodity already have access to alternative liquid hedging instruments traded elsewhere (e.g., off-exchange). Hedgers and speculators may prefer an established hedging instrument because the existing liquidity, and the consequential smaller bid/ask spread, among other things, result in lower costs to transact as compared to a newly established market. However, a new exchange-traded commodity contract whose standardized design conforms to physical market practices could attract trading volume from established hedging instruments by offering enhanced price transparency and minimizing counterparty risk.

In order to facilitate commercial use of the market for hedging or pricing, consideration should be given to providing for alternate settlement mechanisms, such as properly structured and monitored exchange-for-physical transactions that permit settlement to be affected or delivery to be made with a different grade or quality or at a different location. Any such alternatives should be specified.

Principle 3: Correlation with Physical Market - *While designing and/or reviewing the commodity derivatives contracts, relevant Market Authorities should ensure that contract terms and conditions should, to the extent possible, reflect the operation of the underlying physical market and avoid impediments to physical delivery of commodities. Relevant Market Authorities should review the contracts under their jurisdiction on a periodic basis for appropriate correlation with the physical market to ensure that the contractual terms and conditions conform to the prevailing physical market practices.*

The purpose of designing a commodity derivatives contract to reflect the operation of the underlying physical commodity market is to avoid or minimize the possibility of manipulation or price distortion in the commodity derivatives contract.

For example, the price of a commodity futures contract at expiration should reflect the value of the underlying physical commodity as specified in the terms of the commodity futures contract, plus or minus the costs associated with making or taking delivery, as well as any other clearly defined and known divergence between the futures contract's specifications and the contract's delivery *basket*. For physical delivery contracts, the possibility of delivery is the market force that usually causes convergence of physical and futures markets at expiration. However, there are instances where futures markets are susceptible to non-convergence of cash and commodity prices, price distortion or manipulation when there are impediments to making or taking delivery.

A high correlation between physical market prices and commodity futures market prices may be achieved by designing the futures contract with terms and conditions which conform to the prevailing physical market commercial practices of the commodity underlying the futures contract. A well-designed contract therefore provides surveillance staff with visible physical market metrics as needed (e.g., commercial practices in the physical market that can be the subject of surveillance monitoring).

Accordingly, exchange-traded commodity derivatives contracts such as futures contracts should, to the extent possible, be designed to conform to prevailing physical market commercial practices, including commodity grade and quality specifications, to avoid impediments to delivery and reduce the likelihood of non-convergence of physical and commodity derivatives prices, manipulation or a disorderly market. The terms and conditions should result in a deliverable supply that reasonably can be expected to be available to short traders and saleable by long traders at its market value in normal cash marketing channels. In this regard, delivery locations should be selected to ensure adequate and sufficient supply of the deliverable commodity.

Discussion

Characteristics of the underlying physical market

Designing a commodity contract to conform to the underlying physical market of the commodity requires a detailed understanding of the characteristics and operational features of the relevant physical market. Particular attention should be given to the cash pricing and delivery systems as well as historical patterns of production, consumption, and supply of the underlying commodity, including whether the commodity is seasonal in nature or produced or consumed in limited geographical regions. Smaller physical markets with limited deliverable supplies may require additional surveillance by relevant Market Authorities.

Relevant Market Authorities should consider, without limitation, the following physical market characteristics in designing and/or reviewing commodity contracts, including differences within a commodity market with regard to the commodity in question:⁴¹

1. Size and structure of the physical market;
2. Commodity characteristics (e.g., grade, quality, weight, class, growth, origin, source etc.);
3. Historical patterns of production, consumption and supply, including seasonality, growth, market concentration in the production chain, regional, domestic or international export focus and logistics;
4. Extent of distribution (dispersal) of production and consumption of the physical commodity among producers, merchants and consumers;
5. Accepted market practice at the physical commodity market in question, including loading tolerances and delivery of alternative supply and location under the contract terms;
6. Adequacy, nature and availability of supply of the physical commodity, including an estimate of the deliverable supplies for the delivery month specified in the commodity contract and monitoring of any large imbalances of positions versus historic settlement of a physically settled commodity, also in consideration of Principle 14;⁴²
7. Movement or flow of physical commodity;
8. Liquidity of the physical market;
9. The cash pricing system including transparency, availability, reliability and frequency of cash pricing;
10. Price volatility; and

⁴¹ A relevant Market Authority may choose to impose more rigorous standards where physical market practices are relatively informal. Exchanges also may offer their own dispute resolution procedures that differ from physical market conventions. Also, additional or different considerations may apply to OTC contracts that provide more variation and would be considered “non-standardized”; this guidance is not intended to restrict such innovations.

⁴² This data is needed to support an analysis of the contract’s settlement reliability.

11. The existence of price controls, embargoes, export restrictions or other regulation and changes in regulation or controls affecting the price or supply of the physical market commodity.

Delivery specification issues for physical delivery contracts

If commodity derivatives contracts are designed to require the physical delivery of the underlying commodity in satisfaction of positions remaining open at contract expiration, the following contract delivery specification issues should be considered:

- *Quality or deliverable grade.* A commodity derivatives contract should set forth a complete specification of commodity characteristics for par delivery, including those relating to grade, class, and weight. The quality or grade of a commodity that will satisfy the contract's delivery obligation should conform to the prevailing practices in the underlying physical market and be fully specified as part of the contract's terms and conditions. Contracts that call for delivery of a specific quality of commodity may provide commercial participants with a clearer, more efficient hedging and price-basing instrument than a contract that permits delivery of a broad range of commodity grades or classes. However, contracts that permit delivery of only a specific grade of commodity may be susceptible to manipulation if that grade of the commodity is in short supply or controlled by a limited number of sellers. If deliverable supplies of a commodity are expanded beyond par grades to reduce the likelihood of manipulation, relevant Market Authorities should assess the premiums or discounts assigned to the non-par grades to ensure that they are set at levels that are consistent with the physical market.
- *Size of delivery unit.* Any deviation from the physical market delivery size (e.g., rail car, barrel, bushel etc.) or composition should be closely examined to ensure that it does not constitute a barrier to delivery or otherwise impedes the physical delivery of the commodity.
- *Delivery instruments.* The contract should specify acceptable delivery instruments including warehouse receipts, bills of lading, shipping certificates, demand certificates, collateralized depository receipts, or crypto wallets where crypto derivatives are involved. The contract also should specify whether such instruments are negotiable or assignable and under what conditions.
- *The delivery process.* The delivery process, including timing, location, manner and form of delivery and service level of delivery (e.g., firm or interruptible) should reflect physical market practices to permit monitoring and to reduce the likelihood of disruption.
- *Delivery points.* Issues associated with identifying acceptable delivery locations include: (a) the level of deliverable supplies normally available, including the seasonal distribution or intermittent nature of such supplies, (b) the nature of the physical market at the delivery point (e.g., auction market, buying station or export terminal), (c) the number of major buyers and sellers, and (d) normal commercial practices in establishing cash commodity values. Consistent with the grade differentials discussed above, commodity contracts that permit delivery in more than one location should set delivery premiums or discounts consistent with those observed in the physical market. The adequacy of transportation links to and from the delivery point should be considered.

- *Type of delivery facility.* Delivery facilities can include warehouses or elevators for agricultural commodities, and bank or vault depositories for precious metals. Issues associated with the selection of delivery facilities include: (a) the number and total capacity of facilities meeting contract requirements; (b) the proportion of such capacity expected to be available for short traders who may wish to make delivery against commodity contracts and seasonal changes in such proportions; (c) the extent to which ownership and control of such facilities is dispersed or concentrated; and (d) the ability of the relevant Market Authority to access necessary information from such facility.
- *Inspection and certification procedures.* The contract should contain terms detailing any inspection, measurement or certification procedures for verifying that the delivered commodity meets the quality or grade standards of the contract. These terms and conditions should conform to physical market practices. If the commodity is perishable, the contract should state if there is any limit on the duration of the inspection certificate and the existence of any discounts applied to deliveries of a given age.
- *Payment for transportation or storage.* The commodity contract should contain terms and conditions detailing the parties' responsibilities regarding costs associated with transporting the commodity to and from the designated delivery point. The contract also should specify how and when title to the commodity transfers from the short to long position holder as well as the responsibilities of the parties with respect to any storage costs.
- *Contract delivery months.* The delivery months of the commodity contract should take into account cyclical production and demand. Delivery months should be listed when sufficient deliverable supplies are expected to exist in the physical market. Seasonality of a commodity also may affect the availability of warehouse space and transportation facilities.
- *Legal enforceability.* If the trading, clearing and/or settlement by delivery of a commodity contract takes place across different legal jurisdictions, a disparity between governing laws may cause interpretation differences of the contract terms; for instance, through a technical default on delivery obligations, delivery disputes, interpretation of the contract or insolvency proceedings resolution. The legal risk of unenforceability of a contract, when subject to multiple legal systems, would need to be assessed before the contract's launch. The relevant Market Authority should identify and seek to mitigate this risk which is particularly acute for laws governing cargoes and their storage, in the application of exchange and clearing house rules.
- *Default provisions and force majeure.* The commodity derivatives contract should set forth the rights and obligations of the parties in the event of default by the buyer or seller and the manner in which the clearinghouse or exchange guarantees settlement of the transaction.⁴³ Contractual monetary consequences imposed upon, or collateral received from defaulting parties should be sufficient to address the replacement risk and performance of the contracts. The contract also should specify the terms, if any, under which a party may be excused from its performance obligations due to events beyond its control.⁴⁴ Local commercial law may influence how the contract is designed and

⁴³ This would also be determined by local law, or the law adopted in the contract if different, or both, as well as the exchange or clearinghouse rules.

⁴⁴ Exchanges or their clearing house may choose to incorporate this in their business rules rather than the

contract terms should specify the governing law.-

In all cases, contract terms that deviate from physical market practice (which may at times be necessary) should be explained and justified in light of their likely impact on orderly trading, their effect on deliverable supplies and price convergence.

Principle 4: Promotion of Price Convergence through Settlement Reliability – *Relevant Market Authorities should ensure that settlement and delivery procedures outlined in the contract design reflect the underlying physical market and promote reliable pricing relationships and price convergence and are regularly evaluated to ensure that they meet this standard. Settlement and delivery terms should be specified and made available to market participants.*

This Principle focuses on factors that might make the contract susceptible to manipulation or price distortion. These factors generally relate to the size and liquidity of the underlying physical market and to the reliability of the price series or index upon which settlement is based.

Settlement is the act of fulfilling the performance requirements of the commodity derivatives contract. Settlement may be effected either by physical delivery or cash payments. Whether settlement is by cash or physical delivery, the relevant Market Authority responsible for contract design should be able to demonstrate that the price series or index that is referenced as a settlement price in a physical commodity derivatives contract is a reliable indicator of transactions in the underlying physical market, publicly available and timely. Such reliability is essential to ensure that the contract serves a reliable and acceptable hedging and price discovery function.⁴⁵

Discussion

Cash settlement

Cash settlement means that at contract expiration, the contract is settled by cash payment in place of physical delivery of the underlying commodity. A relevant Market Authority should evaluate the susceptibility of a cash-settled contract to manipulation or price distortion.

In this regard, a relevant Market Authority should consider the size and liquidity of the underlying physical market. Situations susceptible to manipulation include those in which the volume of cash market transactions and/or the number of participants determining the cash-settlement prices are relatively low or unexpectedly high, as both a low number of participants and unexpected high volume of cash market transactions determining the cash-settlement prices might mean susceptibility to manipulation or an indicator of market manipulation (i.e. wash trades or round trip trades in spot markets to move the forward price). Under such circumstances there could be an incentive to manipulate or artificially influence the data from which the cash-settled price is derived or to exert undue influence on the cash-settlement price's computation in order to profit on a derivatives contract position in that commodity.⁴⁶

contract specifications.

⁴⁵ See OR08/11 *Task Force on Commodity Futures Markets Report to the G-20*, IOSCO, November 2010, fn 7.

⁴⁶ See cases cited in the Enforcement Section of this Report.

Relevant Market Authorities should also focus on the reliability of the price series or index referenced in the commodity derivatives contract. A key concern is that the data from which the cash-settlement price is derived will not be susceptible to manipulation or otherwise artificially influenced or distorted.

A commodity derivatives contract will not be readily susceptible to manipulation or distortion if the cash price series or index used for settlement is reliable (i.e., the settlement price should accurately reflect prices in the underlying physical commodity market). Contract design considerations addressing reliability should include an analysis of the reliability of the physical commodity reference price on which pricing of the contract is based, public availability and timeliness of pricing information, commercial acceptability and public availability of the price series or index that is used to calculate the cash settlement price, liquidity of the physical market and the potential for price manipulation or distortion of the price used for cash settlement.

Design considerations should also ensure that the size of the sample used to determine the price series or index is sufficiently broad to be representative of the underlying physical market. The price series (or index) should be based on a sufficiently large record or survey of transactions such that it cannot be readily manipulated to advantage a position in the cash-settled contract. Moreover, the price series should be based on sufficient physical market activity – geographically and seasonally – covering a broad cross-section of market participants.

A relevant Market Authority's ability to review the procedures that are utilized to develop a commodity contract's settlement price will vary depending on whether the price series or index is constructed by a regulated market or a third-party provider. A regulated market is by definition subject to direct oversight by a governmental regulator or SRO, who generally will have power to review the contract if necessary.

In contrast, relevant Market Authorities generally do not have jurisdiction over third-party price reporting agencies. In this regard, information provided by third-party price reporting agencies (PRAs) plays a critical role with regard to the design of commodity derivatives contracts and as a basis for the floating price component for settlement of OTC commodity derivatives contracts. A commodity derivatives contract that references an opaque or unrepresentative price series could be more susceptible to manipulation.⁴⁷

Accordingly, relevant Market Authorities responsible for contract design or the review of contracts that reference a price series or index should be able to demonstrate that the relevant price series or index is reliable, acceptable, publicly available and timely. In addition to disclosure of the methodology used to construct an index, relevant Market Authorities should be able to access the actual reported transactions used to form the price series or index, to be able to assess whether the prices reliably reflect actual physical commodity market prices.

In the case of a third-party price series or index provider, the relevant Market Authority should be satisfied that the third party provides safeguards against susceptibility to manipulation. Where the market itself generates cash market price series, it should be able to demonstrate the

⁴⁷ See, [FR06/12 Principles for Oil Price Reporting Agencies \(iosco.org\)](#) pp 5-6 “Regardless of the underlying physical commodity, a market authority following IOSCO’s Principles for the Regulation and Supervision of Commodity Derivatives Markets will want to determine that a PRA-assessed price that is referenced by the terms of a derivatives contract accurately reflects the transactions in the market that it purports to measure, the data are sufficient to represent that market and such data are *bona fide*.”

specifications of the calculation procedure and the robustness of safeguards in the cash settlement process to protect against susceptibility to manipulation.

There should be clear and timely procedures for general publication of price series or index values.

Physical Delivery – the importance of physical delivery terms for price convergence

For derivative contracts calling for delivery of the underlying product, delivery is the critical mechanism that drives price convergence. For example, as a futures contract approaches expiration, differences between the futures price and the cash price (which generally reflect the sum of the costs and benefits of storing, handling, transporting and lending income and convenience yield of the cash commodity (i.e., the carrying costs)) should be reduced. There always will be some *frictional* differences due to differences between the terms and conditions of the commodity derivatives contract and the physical commodity actually delivered, such as for example actual storage and transportation costs and recognized delivery grade variations.

Effective convergence requires not only that the terms and conditions of the contract generally reflect the operation of the underlying physical market (see preceding condition), but also that those terms and conditions will result in an adequate deliverable supply that reasonably can be expected to be available to both long and short traders at its market value in normal physical marketing channels. The totality of these design considerations helps ensure that the contract will not be susceptible to manipulation or distortion.

Key considerations that promote effective price convergence for a physical delivery commodity futures contract should include an analysis of deliverable supplies and locations, quality or grade of the deliverable commodity, inspection, measurement and certification procedures, size of the delivery unit, adequacy (including accessibility and financial condition) of delivery points and facilities, and the delivery process (timing, storage, transportation). A straightforward and well-designed delivery process promotes arbitrage between the physical and futures market that is necessary for convergence to occur, provided the terms and conditions accurately reflect the physical market, those terms and conditions as well as market practices are clear to market participants, and there is sufficient liquidity in the commodity derivatives contract.

The estimate of deliverable supply should reflect the quantity of the referenced commodity product that is or will be in store at the delivery point(s) specified in the commodity contract or that economically can be moved into or through such points within a short period of time after a request for delivery and which is available for sale on a spot basis within the marketing channels that normally contribute to the delivery points.

In particular, delivery terms should be scrutinized closely for possible impediments to delivery or incentives not to deliver. Such impediments may be related to the inherent nature of the commodity as traded in the physical market (such as the size of deliverable supply or seasonality, supply and demand of the commodity, the types of participants dealing in the physical commodity and their specific trading practices) or to the mechanics of the delivery process (e.g., transportation requirements, costs of inspection, physical warehousing, including issues with custody of crypto assets and timing of such delivery).⁴⁸

⁴⁸ Cases of *force majeure* affecting delivery should be addressed by surveillance programs see fn 30.

For example, with respect to physical-delivery commodity contracts that use a shipping certificate or similar delivery instrument, the consideration of deliverable supply should reflect the fact that the underlying commodity may not have to be moved into or through the delivery point(s) prior to delivery of the shipping certificate in the futures market.⁴⁹ Similarly, if a change occurs in the production areas, marketing patterns, or export locations for a commodity, the delivery locations specified by the contract could eventually deviate from customary merchandising arrangements and no longer reflect commercial realities.

Principle 5: Transparency on Contractual Terms and Conditions -
Information concerning a physical commodity derivatives contract's terms and conditions, as well as other relevant information concerning delivery and pricing, should be readily available to the relevant Market Authorities with respect to all derivatives transactions within its jurisdiction and to market participants in organized derivatives markets.

Without limiting the factors that a relevant Market Authority includes in those terms and conditions, market rules should specify, for example:

- i. Minimum price fluctuations (price ticks);*
- ii. Maximum price fluctuations (daily price limits), if any;*
- iii. Last trading day;*
- iv. Settlement and delivery procedures;*
- v. Trading months;*
- vi. Position limits, if any;*
- vii. Reportable levels;*
- viii. Trading hours; and*
- ix. Custody arrangements.*

Information concerning the operation of the physical commodity derivatives markets, delivery requirements (acceptable delivery instruments, delivery procedures, delivery points, etc.), pricing in the physical and futures markets and the terms and conditions of the commodity contract and related rules and procedures of the market (e.g., price limits and other aspects of the contract such as position limits) should be readily available in a timely manner to relevant Market Authorities and market participants.

Where commodity derivatives markets operate, or their incentive arrangements promote trading in a contract, the existence of such programs should also be published to market participants and remain subject to regulatory oversight.⁵⁰ The pertinent areas should be contained within a clear, concise and publicly available contract specification.

⁴⁹ For an illustration of the complex manner in which delivery terms may affect price convergence (and the differing academic analyses regarding the convergence issue) see *Report and Recommendations of the Subcommittee on Convergence in Agricultural Commodity Markets to the Agricultural Advisory Committee of the Commodity Futures Trading Commission on Convergence in Wheat with Implications for Other Commodity Markets*, Commodity Futures Trading Commission, 2009, available at: <http://www.cftc.gov/ucm/groups/public/@aboutcftc/documents/file/reportofthesubcommitteeonconve.pdf>.

⁵⁰ Some relevant Market Authorities require the existence of an incentive scheme and its basic benefits to be made public but permit where appropriate specific details such as the exact amount of payments to remain confidential.

Chapter 4 Principles on Data and Market Transparency

A. Introduction

The Principles in this section aim to ensure the integrity of commodity derivatives markets. Commodity benchmarks play a very critical role in sound price formation in the underlying commodity markets, as well as for hedging and other purposes. A commodity index should accurately and reliably represent the value of the underlying interest of the commodity that it is intended to represent and measure. When a commodity index is not representative of its underlying interest, it would be prone to manipulation and result in price disruptions and value transfer problems. This would in turn adversely impact market participants, and the reputation and confidence in the commodity derivatives markets. Therefore, adequate controls should be in place to ensure the integrity of a commodity index.

Applying these Principles helps to address issues around vulnerabilities arising from voluntary reporting of data, low liquidity in physically settled contracts, and the variation in methodologies across third-party price or index providers. These vulnerabilities could create opportunities for manipulation of the data and thus of an index to benefit the positions of those who contribute the data.

Transparency with respect to transactions on the commodity derivatives markets is also critical, not only for signaling expectations about price, but also for providing data that might improve the analysis of any causal relationships between commodity derivatives and physical commodity market activity. Transparency also allows for an assessment of critical market factors such as the concentration of risks, which can be achieved through public disclosure of different classes of large traders within the bounds of anonymity as well as promotion of reporting of OTC derivatives transactions to designated trade repositories.

B. Principles on Data and Market Transparency

Principle 6: Role of Price Reporting Agencies in Price Assessments - *Relevant Market Authorities should consider whether the third-party price or index provider that performs a price assessment function, including a Price Reporting Agency (PRA), considers the Principles for Oil Price Reporting Agencies (PRA Principles).*^{51 52}

The PRA Principles provide guidance in establishing safeguards against susceptibility to manipulation or other factors that may negatively affect the integrity of the third-party price or index. Therefore, the relevant Market Authority should consider taking appropriate steps to determine whether the third-party price or index provider that performs a price assessment function or PRA has suitable controls, policies and procedures in place in its assessment of the price of a commodity derivative contract. These should include, among others:

- i) Formal documentation of a price assessment methodology;

⁵¹ Principles for Oil Price Reporting Agencies, Final Report of the IOSCO Board (October 2012), available at: <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD391.pdf>

⁵² The European Union Benchmark Regulations, Regulation (EU) 2016/2011 (the BMR) has largely adopted the PRA Principles under Annex II of the BMR, see BMR at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R1011&from=en>

- ii) Procedures for amending the price assessment methodology;
- iii) Controls around the market data used in price assessments;
- iv) Procedures to ensure the integrity of the price reporting process;
- v) Policies to ensure appropriate qualification of price assessors;
- vi) Controls requiring appropriate supervision of assessors and price assessments;
- vii) Procedures for document retention and production of audit trails;
- viii) A conflict of interest policy;
- ix) Procedures for receiving and investigating complaints;
- x) A commitment to cooperating with Market Authorities;
- xi) Appointment of an external auditor to assess compliance with the PRA Principles;
- xii) A documented Business Continuity Plan (BCP);
- xiii) Procedures for mitigating actions when there is a delay or failure to produce a price assessment;
- xiv) Controls related to data security such as the prevention of system breaches;
- xv) Procedures to ensure outsourced activities are appropriately conducted; and
- xvi) Procedures on performing an orderly wind-down when the PRA ceases to provide a price assessment.

PRAs are publishers and information providers who report prices transacted in both the physical and derivatives markets. PRAs use data, mainly from transactions reported to them by market participants, to make and publish an informed assessment of price levels at distinct points in time and for physical market products, including those in which no transactions may have taken place recently. Prices reported by PRAs are used to varying degrees as references for transactions in a number of physical commodity markets, exchange-traded contracts, clearing houses and OTC oil derivatives contracts, making these prices significant to the functioning of these markets.

In October 2012, IOSCO adopted the PRA Principles. Although the PRA Principles were developed in the context of PRAs and oil derivatives markets, PRAs are encouraged to implement the PRA Principles more generally for any commodity derivatives contract that references a PRA assessed price, without regard to the nature of the underlying.⁵³

Discussion

This Principle has been developed considering the PRA Principles as referenced in the controls, policies and procedures, and guidelines, specifically (i) – (x) and (xvi). The PRA Principles are intended to enhance the reliability of price assessments that are referenced in derivatives contracts and are designed to:

⁵³ See FR06/12 *Principles for Oil Price Reporting Agencies, Report of the Board of IOSCO*, October 2012, available at: <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD391.pdf>, page 7

- i) Minimize the vulnerability of the assessment process to factors that could undermine the reliability of a price assessment as an indicator of physical commodity market values or increase the susceptibility of a commodity derivatives contract to manipulation or price distortion;
- ii) Facilitate a relevant Market Authority's determination as to whether a price assessment that is referenced by the terms of a commodity derivatives contract accurately reflects the transactions in the physical market that it purports to measure, the data is sufficient to represent that physical market and such data is *bona fide*; and
- iii) Facilitate a relevant Market Authority's ability to detect, deter and if necessary, take enforcement action with respect to manipulation or other abusive conduct.

Mechanisms for Implementation

Timely and effective mechanisms for implementing the principles include the following:

1. Voluntary adoption and implementation of the principles by PRAs in their internal policies and procedures and/or through industry codes; and/or
2. The use by a Market Authority of its rule approval and/or review authority over derivatives contracts, as appropriate, to refuse admission to exchange trading or central clearing of any derivatives contract that references a PRA-assessed price which, in the opinion of the Market Authority, has been developed under policies and procedures that do not reflect effective implementation of the PRA principles and call into question the reliability of an assessment.

In this regard, IOSCO recommends that Market Authorities consider whether to prohibit trading in any commodity derivatives contract that references a PRA-assessed price unless that assessment follows the PRA Principles.

IOSCO supports the application of the PRA Principles by a Market Authority in a calibrated and proportional manner depending on the risks posed by each type of benchmark or its provider. That is, IOSCO supports innovation in nascent markets and views the application of proportionality as a means to enable that development. As such, acceptable approaches in applying proportionality may include, but are not limited to, the relevant Market Authority:

- setting a threshold for use of a commodity benchmark in order to trigger regulation; or
- establishing a designation regime, whereby commodity benchmarks may be designated by the Market Authority on its own initiative, on public interest grounds, including:
 - a commodity benchmark that is sufficiently important to the commodity market in the local jurisdiction, or
 - where activities of a commodity benchmark administrator, commodity benchmark contributor or commodity benchmark user raise public interest concerns.

Principle 7: Increased Role of Data and Information – *Relevant Market Authorities should consider establishing a “Code of Conduct” for entities who are either independently or jointly involved in collection, dissemination/publication of data and information relating to the underlying commodity and which plays an important role in the price discovery process*

and timely hedging decisions by non-financial firms.

The timing of financial decisions is extremely crucial and the need for accurate, reliable and real-time data has gained much more importance in the recent past. Globalisation is increasingly becoming about the free flow of data and information. To fulfil the requirement for data in making timely financial decisions, various entities have arisen globally which specialize in publishing commodity-related data on production, imports, exports, tariffs, consumption, etc., which have a direct bearing on the pricing of commodities in the physical and derivatives markets. Such entities potentially trade in the commodity derivatives markets and also provide data to end-users.

The data reported by these entities may be vulnerable to issues of misreporting of collected data, manipulation of information, misuse of data before making it public, etc. With the increasing dependence on data provided by these entities, it becomes essential to establish some basic principles in the form of a code of conduct for these entities. Such code of conduct may be applied to activities related to data collection and to data dissemination to ensure the veracity of such data. The data should:

- Be easy to comprehend;
- Not mismatch with other relevant data; and
- Not lead to confusion in the commodity markets leading to volatility.

If a contract in a commodity derivatives market refers to data provided by such an entity to set the pricing in a contract or have some bearing on pricing of a contract, then the relevant Market Authority may consider restricting such referencing unless the entity providing the data follows the Code of Conduct.

The Code of Conduct does not intend to make judgment on the data processing methodologies followed. It only lays down appropriate conditions to promote the reliability of the reported data which are used to undertake economic decisions by the users. Nothing in these provisions is intended to restrict the entities from adopting their own unique methodologies or from adapting their methodologies to changing market conditions.

Accountability

Such entities should consider undertaking measures to ensure the authenticity of the reported data, such as periodically documenting and disclosing the following information to the public:

- The source and method of collecting initial data (i.e., primary or secondary source);
- Statistical techniques or methodology used for processing of initial data to develop valuable assessments;
- Rationale for adopting the methodology;
- Procedure of review and approval of the selected methodology; and
- Change in the methodology and rationale behind the same.

Such entities should also engage in routine examination of their methodologies to ensure that

the data accurately reflects the economic activity under examination. They may be held accountable for their activities such as collection and dissemination of accurate and reliable data and should take responsibility for any discrepancy involved in the procedure.

Conflicts of interest

The data assessments should not be influenced by the existence of a commercial or personal business relationship between agency, its personnel, clients, market participants or any person connected with them. Such entities should consider implementing policies and procedures for the identification, disclosure and avoidance of conflicts of interest arising from its function as a data reporting agency. It should also consider identifying, disclosing and addressing the conflicts of interest which may exist between its data assessment and any other business carried out by it.

The entities may disclose the conflict of interests to its stakeholders and ensure appropriate segregation of functions of supervision, compensation, systems access and information flows, etc. The reporting agencies should also consider the confidentiality of information submitted to or produced by them subject to their disclosure obligations.

Integrity

The individual(s) or a body corporate involved in the collection of primary data, or the processor of final data have access to first-hand information of the physical market, production of commodities, export and import data, etc. This information may be misused by the data collectors or data processors before making it public for their personal gain by influencing the spot or derivatives markets. Since the data provided by the participants may purely be on a voluntary basis, it creates an opportunity for submitting selective or misleading data in an attempt to manipulate the level of assessment.

To prevent the above-mentioned scenario, appropriate criteria establishing the identity of the participant and its employee(s) and employees' authorization to submit data on behalf of the participant should be considered.

To maintain the integrity of the reporting process, such entities should consider implementing internal controls and written procedures to identify misreporting of data by the participants or any communication between participants and processors in an attempt to misuse the data to influence the assessment of data for the benefit of any trading positions of the participants, processors or any third party. These controls may include, but are not limited to, cross checking of market indicators to validate the submitted information and alternatively, procedures may also be developed to collect real-time data directly from the primary respondents.

Qualification and training

Such entities should consider implementing internal rules and guidelines for selecting processors, including their minimum level of training, experience and skills, as well as the process for periodic review of their competence. The entity should maintain succession planning in respect of its processors to ensure that assessments are made consistently and by employees who possess the relevant levels of expertise.

Audit

Such entities should consider implementing policies to retain and document the relevant data/information for a minimum number of years such as market data, the identity of assessors/data submitters and any other person who generated any of the information, the judgments that are made by processors in making data assessments, etc.

Cooperation

In the event of any complaint against the entity to the relevant Market Authority which is followed by an investigation by the relevant Market Authority, the reporting entity should cooperate and promptly hand over the audit trails or any other relevant information required by the relevant Market Authority in carrying out their regulatory functions.

Principle 8: Public Disclosure. *Relevant Market Authorities should publish the aggregate exposures of different classes of large traders, especially commercial and non-commercial market participants, within the bounds of maintaining anonymity of individual market participants.*

Enhancing transparency to the public through publication of aggregated large trader information

In order to address the need for greater transparency of exchange-traded contracts, IOSCO previously endorsed the reporting to Market Authorities of large trader positions for relevant on-exchange contracts and the publication of aggregate data on these positions.⁵⁴ Publication of aggregate position data to the public has been endorsed in a “technical advice” paper by the Committee of European Securities Regulators (CESR), which recommended that position data reported to Market Authorities regulators “could be used to underpin a system of aggregate open interest reporting to the market”.⁵⁵

Publishing position data - in aggregate to protect strategies and identities of individual market participants and traders - classified by trader type, provides valuable transparency to market participants and facilitates analysis of market trends and historical development. The

⁵⁴ See p7 [OR01/11 Task Force on Commodity Futures Markets Report to the Financial Stability Board](#), IOSCO, April 2011, fn 7 and p15 [OR08/10 Task Force on Commodity Futures Markets Report to the G-20](#), IOSCO, November 2010, fn 7.

Reports of aggregate data on large trader positions are published in a number of jurisdictions. In the United States, the CFTC publishes weekly Commitment of Trader (COT) reports, available at: <https://www.cftc.gov/MarketReports/CommitmentsofTraders/index.htm>. In the United Kingdom, ICE Futures Europe, publishes Commitment of Trader Reports for its most liquid contracts. See <https://www.theice.com/marketdata/reports/ReportCenter.html>. In Japan, the Ministry of Economy, Trade and Industry (METI) approved exchange, Tokyo Commodity Exchange, Inc. (TOCOM), publishes the daily Commitment of Trader Reports for all the listed contracts. See: <http://www.tocom.or.jp/souba/torikumi/index.html> for 6 categories, and <http://www.tocom.or.jp/souba/torikumi2/index.html> for 2 categories.

⁵⁵ *CESR Technical Advice to the European Commission in the Context of the MIFID Review – Post Trade Transparency Standards*, p. 56, 13 October 2010, available at: https://www.esma.europa.eu/sites/default/files/library/2015/11/compiled_version_technical_advice_and_additional_information_mifid_review_2.pdf

dissemination of such market data also aids independent academic research. In order to facilitate “whole market” comparisons and contrasts of markets, relevant global Market Authorities should consider the utility and feasibility of harmonizing public reporting classifications in order to achieve generally comparable data sets, provided there are no conflicts with local regulations or position data does not divulge confidential information due to the structure of the local market or otherwise.

Aggregate information on trader positions has been published for some time in various jurisdictions in the form of Commitment of Trader (COT) reports. Such reports are available in both a short and long format. The short report shows open interest separately by reportable and non-reportable positions. For reportable positions, additional data is provided for commercial and non-commercial holdings, spreading, changes from the previous report, and percentages of open interest by category, and numbers of traders. Supplemental reports show aggregate futures and options positions on Noncommercial, Commercial, and Index traders in twelve selected agricultural commodities.⁵⁶

The utility of aggregate position data is reflected in the broad use by market participants. A review of one COT program illustrates both the popularity of the COT reports as well as the types of persons who use the reports.⁵⁷ Commenters to this review were virtually unanimous in strongly recommending continuation of publication of the COT reports.⁵⁸ The program review, which resulted in separate reporting of commodity index reporting, illustrates the need to reexamine markets as they evolve with new types of participants.⁵⁹

⁵⁶ See CFTC COT link at: <https://www.cftc.gov/MarketReports/CommitmentsofTraders/index.htm>

⁵⁷ One commenter provided a comprehensive list of traders who use the COTs: “*farm marketing advisors/brokers; commercial hedging advisors/brokers; FCMs, IBs, and CTAs; cash merchandiser/hedgers or similar decision makers, including end-users, exporters, processors, merchants; [and] OTC dealers or other trading desks.*” Other commenters cited one or more of the types of entities subsumed in the NGFA list. In addition to such commercial and professional users, as noted above, a great many individual traders commented that they depend on the COT reports in conducting their personal trading. See *Commodity Futures Trading Commission Actions in Response to the “Comprehensive Review of the Commitments of Traders Reporting Program”*, p. 5 (December 5, 2006) <https://www.cftc.gov/sites/default/files/idc/groups/public/@commitmentsoftraders/documents/file/noticeonsupplementalcotrept.pdf>.

⁵⁸ *Ibid.*, p.4.

⁵⁹ The CFTC explained its reasoning for publishing a new category for index traders as follows: Historically, the intent of the classification of traders in the COT reports is to class traders according to their general purpose for trading in futures markets. In the past, and for many markets currently, a two- fold classification of reportable traders as “non-commercial” and “commercial” was, and is, appropriate. The activity of these two classes of traders is seen to convey information about market conditions in the underlying physical market.

In contrast, commodity index trading, whose purpose is to gain long-side exposure to a broad index of commodity prices as an asset class, is not based on a view about current or expected individual commodity prices, as would be the case for most speculative trading. It is not based on, nor does it convey any information about, activity in the underlying [physical market], as would be the case for most traditional hedging activity. Accordingly, the Commission believes the COT reports would be enhanced, and market transparency improved, if commodity index trading were separately reported, provided that such separation can be done accurately. See *Commodity Futures Trading Commission Actions in Response to the “Comprehensive Review of the Commitments of Traders Reporting Program”*, p.9 (December 5, 2006). <https://www.cftc.gov/sites/default/files/idc/groups/public/@commitmentsoftraders/documents/file/noticeonsupplementalcotrept.pdf>

Principle 9: OTC Transparency - *All IOSCO Members should promote the reporting of OTC derivatives contracts to trade repositories in order to improve transparency, mitigate systemic risk, and protect against market abuse in commodity derivatives markets. The relevant governmental regulator of commodity derivatives markets should work with regulators responsible for trade repositories to:*

i) evaluate what improvements are appropriate to enhance the usefulness of, and access by regulators to and disclosure to the public of, OTC commodity derivatives markets data that is reported to trade repositories; and

ii) take affirmative steps such as encouraging ongoing work by the industry, rulemaking or recommending legislative changes to achieve these objectives.

Trade repositories are entities that maintain a centralized electronic record (database) of OTC derivatives transaction data. By centralizing the collection, storage and dissemination of data, trade repositories can play an important role in providing information that supports risk reduction, operational efficiency and cost savings for both individual entities and the market as a whole.

In addition, given their centralized role, trade repositories are able to provide information on OTC derivatives markets that could serve to: (i) promote financial stability; (ii) assist in the detection and prevention of market abuse; and (iii) enhance the transparency of information to relevant authorities and the public.⁶⁰

Discussion

The use of trade repositories significantly increases the transparency of derivative transactions because they create a central location where all relevant regulators evaluate the market for systemic risk issues. This is especially true for non-standardized, illiquid transactions that may not be subject to clearing requirements. Additionally, trade repositories also help relevant national regulators by supplying data that is helpful in pursuing manipulation cases that have been committed across multiple global financial markets.⁶¹ Since the launch of the OTC Derivatives Reform in 2009 following the Pittsburgh Summit, the vast majority of the FSB jurisdictions have successfully implemented trade reporting requirements. IOSCO members should also continue to promote the importance and benefits of trade reporting to ensure implementation beyond the FSB/G-20 member jurisdictions.

⁶⁰ [Report On OTC Derivatives Data Reporting and Aggregation Requirements \(iosco.org\)](http://www.iosco.org)

⁶¹ See p12 *OR08/10 Task Force on Commodity Futures Markets Report to the G-20*, IOSCO, November 2010, fn 7

Chapter 5 Principles for the Surveillance of Commodity Derivatives Markets

A. Introduction

Physical commodity derivatives markets are unique

The trading of physical commodity derivatives differs fundamentally from the trading of financial-based derivatives in that the actual supply of the underlying physical commodity and the delivery of the physical commodities are restricted to a finite supply. Notwithstanding the great diversity among the underlying commodities on which derivatives contracts are based, from the perspective of surveillance, physical commodity derivatives markets can be grouped according to their settlement provisions – physical delivery and cash-settled.

Commodity derivatives contracts that require the delivery of a physical commodity are most susceptible to manipulation when the deliverable supply on such contracts is small relative to the size of positions held by traders, individually or in related groups, as the contract approaches expiration.

A physical delivery contract's supply is usually further restricted beyond the naturally occurring finite amount of supply of the commodity in question by the contract's specification of what constitutes acceptable deliverable supplies. This specification is necessary in order to ensure consistency and thereby confidence. An increase in physical commodity prices may stimulate supply by making economically viable areas or techniques of production that were previously prohibitive. Nevertheless, this increased supply can be affected by time-lags in production. In the case of agricultural commodities, increased supply in times of shortage may not be available for months, or perhaps years in the case of cyclical increase of consumption.

The more difficult and costly it is to augment deliverable supplies within the time constraints of the expiring commodity derivatives contract's delivery terms, the more susceptible the contract is to squeezes and other forms of manipulation. Because of this concern, surveillance programs need to identify the buildup of large position concentrations, particularly during the settlement month.

Surveillance in cash-settled contracts emphasizes the integrity of the cash price series used to settle the futures contract. The size of a trader's position at the expiration of a cash-settled commodity derivatives contract generally should not affect the price of that contract (provided that there are no constraints on available supply)⁶² because the trader cannot demand or make delivery of the underlying commodity.

These Principles describe best practices for surveillance programs to detect manipulative or abusive conduct and to ensure to the extent possible the operation of fair and orderly physical commodity derivatives markets. The Principles reflect the accumulated experiences of Task Force members with respect to physical commodity markets and are intended to be of general application, as appropriate, to all commodity derivatives markets.

These Principles also may be applied as appropriate to developing forms of electronic

⁶² See discussion on page 44.

execution facilities for standardized OTC derivatives and in the context of clearing of both standardized and bespoke OTC derivatives contracts. The application of the Principles in such circumstances must be determined on a case-by-case basis by the relevant Market Authority, taking into account the type of contracts in question, the volume of trading, the type of market participants, whether the transactions perform a price discovery function or otherwise have an impact on other regulated markets, as well as the scope of the relevant Market Authority's legal authority.

Finally, it is important to bear in mind that market surveillance is only one mechanism used to ensure market integrity and the orderly functioning of markets. These Principles, which also address disorderly markets, enforcement and information sharing, should therefore not be treated in isolation, but considered in conjunction with all of the other Principles contained in this Report, as well as with other relevant IOSCO Principles, which in their entirety help promote market integrity and the orderly functioning of markets.⁶³

B. Principles for the Surveillance of Commodity Derivatives Markets

Appropriate framework and resources

Principle 10: Framework for Undertaking Market Surveillance – *Relevant Market Authorities should have a clear and robust framework for conducting market surveillance, compliance and enforcement activities and there should be oversight of these activities. A market surveillance program should take account of a trader's related derivatives and physical market positions and transactions, including the impact of ETPs, where relevant.⁶⁴ Market surveillance programs should be supported by sufficient resources, access to physical market data and analytical capabilities.⁶⁵*

The general objective of a market surveillance program is to monitor the market to detect and deter manipulation or abusive trading that distorts prices or disrupts trading or the physical delivery or cash-settlement of contracts, and to provide information that supports the relevant Market Authority's enforcement actions. Each commodity derivatives market should have a clear and robust framework for conducting market surveillance and monitoring compliance with applicable laws, regulations and rules to achieve that objective. It is essential that the framework facilitates the hands-on supervision of markets, as well as the monitoring and analysis of market information through automated computer processes.

Essential elements include: monitoring the day-to-day, real-time trading activity in the markets (both real time as well as post trade), monitoring the conduct of market intermediaries through examination of business operations and collecting and analyzing trading information, typically analyzed on a T+1 basis.

The purpose of real-time monitoring of electronic trading is to ensure orderly trading and allow market operators to identify and correct any market or system anomalies on a timely basis. For

⁶³ See also, for example: FR03/11 *Report on Trading of OTC Derivatives*, IOSCO, February 2011, fn 23 and *Recommendations for Central Counterparties*, Final Report of the IOSCO Technical Committee and the Committee on Payment and Settlement Systems, November 2004, available at: <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD176.pdf>.

⁶⁴ See p.15 *Task Force on Commodity Futures Markets*, Final Report, IOSCO, March 2009, fn 6.

⁶⁵ See p.17 *Task Force on Commodity Futures Markets*, Final Report, IOSCO, March 2009, fn 6.

example, exchanges employ automated systems and human monitoring of the real time data to detect technical errors in the trading system as well as trading that indicates out-of-line prices, including possible *fat finger* errors. Post trade surveillance methods, which collect and analyze data (both using automated systems and human analysis) typically on a T+1 basis use order, transaction, and position data to detect trade practice abuses (including breach of position limits, *spoofing*, *wash trades*, and *banging the close*).⁶⁶

Effective arrangements should be in place to permit the relevant Market Authorities to analyze on-exchange and related physical market and OTC derivatives activities, when needed and if regulations permit, on an aggregated basis. When a large position is detected, a relevant Market Authority should have the ability to collect information that permits it to identify positions under common ownership and control and to identify aggregate exposures.

The criteria for and definition of aggregation needs to be specified. In particular, such arrangements should be designed to offer a prompt and comprehensive overview of a market participant's overall position and activities in relation to the market and to related markets. These arrangements are necessary to assess a market participant's overall position and to gauge that trader's intentions including the possibility of delivery (or in the case of positions that are controlled by a third person that beneficial owner's intentions). The framework for surveillance, compliance and enforcement should be adequately resourced to achieve these goals. This generally will require adequately skilled staff and automated analytical resources. *Adequacy* should take account of the size, structure and complexity of a jurisdiction's markets (exchange, OTC and physical). Relevant Market Authorities should take account of developing trends in markets and adapt their supervisory and enforcement policies and processes accordingly.⁶⁷

Discussion

It is the responsibility of every relevant Market Authority to ensure that a regulated derivatives market is free from such manipulation. This is also a commercial consideration because the ongoing confidence of its users is imperative. Markets in which prices can be easily manipulated are untrustworthy as price indicators or as trading mediums and will, therefore, suffer loss of confidence from market participants.

⁶⁶ In 2020, the CFTC issued an order filing and settling charges against Sunoco LP, for spoofing in futures contracts, including crude oil, gasoline, and heating oil futures that are traded on the New York Mercantile Exchange. As found in the order, from at least February 2014 through January 2015, Sunoco, by and through one of its former traders, engaged in multiple instances of spoofing in energy futures contracts. Commodity Futures Trading Commission, Sept. 30, 2020, available at: <https://www.cftc.gov/PressRoom/PressReleases/8267-20>.

In 2019, the CFTC issued an order and simultaneously settled charges against Eagle Market Makers, Inc. (Eagle), an Illinois firm, for engaging in wash sales and noncompetitive transactions which were traded on the Chicago Board of Trade (CBOT) and the Chicago Mercantile Exchange, Inc. (collectively, CME). According to the Order, from in or about February 2015 to February 2019, Eagle, through certain traders, entered bids and offers of similar quantities in the same futures contract for Eagle's proprietary trading accounts which were intended to and did in fact offset each other upon execution. These future trades involved corn, soybean, soybean oil, soybean meal, wheat and Eurodollar futures contracts. Commodity Futures Trading Commission, June 28, 2019, available at: <https://www.cftc.gov/PressRoom/PressReleases/7952-19>.

⁶⁷ See *Approaches to Market Surveillance in Emerging Markets*, Report of the Emerging Markets Committee of IOSCO, 18 December 2009, available at: <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD313.pdf>.

It is therefore in each market's own interest to ensure that it operates in a fair and orderly manner to ensure its continuing success. Additionally, it is the responsibility of exchanges' regulatory supervisors to ensure that this is done. An exchange that fails to keep its market free from manipulation or disorderly conditions should cause its regulator to ask whether regulatory interests are being pursued and conflicts managed or avoided.

In this regard, IOSCO Principle 8 should be noted. It requires that "the Regulator should seek to ensure that conflicts of interest and misalignment of incentives are avoided, eliminated, disclosed or otherwise managed. In the context of regulated markets, the regulator should take steps so that conflicts of interest or misalignment of incentives among regulated entities are avoided, eliminated, disclosed or otherwise managed."⁶⁸

Although the focus of this Report is on market surveillance, a surveillance framework that monitors market participants' positions also serves a financial integrity function, as the identification of cleared large trader positions can be used to assess the financial exposures of a registered intermediary or clearing member. The collection and analysis of such financial exposure information also facilitates the identification of possible systemic risk that might be precipitated by the failure of a clearing member. In this respect, such monitoring also facilitates a relevant governmental Market Authority's compliance with IOSCO Principle 6, which requires a regulator to have or contribute to a process to monitor, mitigate and manage systemic risk, appropriate to its mandate.⁶⁹

ETPs

ETPs are financial instruments designed to mimic the performance of an underlying index, or benchmark, and try to replicate its performance. Contrary to some of the securities they track, ETF shares, as the most popular ETP type, trade as regular stocks in exchanges, and offer immediate liquidity at their current trading. ETPs offer a low-cost way of owning a large number of securities, as most are passively managed. By buying even a single share of a security ETP, the investor gains exposure to the security or whole basket of securities that the ETP's portfolio contains.

Commodity ETPs, which track different commodities, such as base metals, precious metals, energy, and agricultural goods, enable investors to gain exposure to individual commodities or baskets of commodities in a simple, relatively low-risk and cost-effective manner. They also serve as portfolio diversifier and for hedging purposes. Commodity ETPs are made up of futures or asset-backed contracts, which represent the commodity and track the performance of that particular commodity product. Commodity ETPs also give retail investors easy and inexpensive access to various commodities markets.

There is increasing interest in ETPs, particularly in ETFs, worldwide as evidenced by the significant amount of capital invested in commodity ETPs, which has grown worldwide over the years.⁷⁰ The dynamic growth of ETPs and the potential impact of these instruments on investors (particularly retail investors), market integrity and price formation have become a topic of interest. For example,

⁶⁸ See Principle 8 *Objectives and Principles of Securities Regulation*, IOSCO, June 2010, fn 18. For example, a Market Authority might have rules that prohibit a market's enforcement/compliance staff from including staff whose interests conflict with their enforcement/compliance duties.

⁶⁹ Ibid Principle 6.

⁷⁰ Funds invested in ETFs have grown very quickly since the Great Financial Crisis: from asset holdings of about \$800 billion in 2007, global ETF assets had reportedly exceeded \$7 trillion as of 2020.

rebalancing of a large commodity ETP's portfolio may impact the relevant underlying spot or futures market, depending on timing, size, and direction of the rebalancing activity.

Discussion

Given the increased interest in ETPs worldwide as evidenced by the amount of money invested in these types of products, appropriate disclosure is needed in order to help investors understand and identify ETPs. Disclosure regarding classification that helps investors distinguish ETPs from non-Collective Investment Scheme (CIS) and from traditional CIS and understanding the risks and benefits of each is necessary. The IOSCO Principles for the Regulation of Exchange Traded Funds form a strong basis to achieve this objective.⁷¹

The commodity markets, spot and derivatives, were subject to significant price volatility during the COVID-19 pandemic, particularly in March-April 2020. Relatedly, commodity linked ETPs experienced similar volatility. Regulatory concerns were raised by the volatility risk and losses incurred by investors, including retail investors, in such ETPs and similar products. Principle 24 on Promotion of Investor Education in Commodity Derivatives Markets aims to address these concerns.

As a general matter and noted above, relevant Market Authorities should establish a market surveillance framework that enables monitoring to detect and deter activity that distorts market pricing or disrupts trading or settlement. Such a surveillance framework would include awareness and monitoring of activity in related markets, such as markets in related physical commodities, derivatives, and ETPs.

Principle 11: Monitoring, Collecting and Analyzing Information – *Relevant Market Authorities should develop, employ and maintain methods for monitoring of trading activity on the markets they supervise, collecting needed information and analyzing the information they collect that are efficient and suitable for the type of market being supervised. Effective monitoring of orders and electronic transactions requires real-time monitoring capabilities, supported by automated systems that detect trading anomalies. Monitoring, collection and analysis should also focus on intra-day trading.*

Monitoring is the act of observing price formation in a market and responding to that information, through automated means and by surveillance staff. Relevant Market Authorities should employ methods for monitoring markets that are efficient and suitable for the type of market trading platform and the amount of data to be monitored. This means practically that, for example, electronic markets should be monitored in real-time using technology that is commensurate with the speed and volumes of the electronic platform supervised. Such monitoring typically would focus on identifying any market or system anomalies. Automated surveillance systems which collect and analyze data to detect trading patterns and system anomalies should be in place to support such monitoring. One tool that Relevant Market Authorities may use to assist in monitoring is through the use of global identifiers, such as the Legal Entity Identifier (LEI).

The same considerations apply to the collection and analysis of data. Data such as orders, transaction and position information may be collected in real time but are generally analyzed within a reasonable period soon after such collection, often T+1. Information should be

⁷¹ <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD414.pdf>

collected on-line and in standard form by the trading platform, and by appropriate market participants, such as intermediaries for OTC transactions. Standardization of data collected across markets may be difficult to achieve initially but would, in due course, foster improved cross-border surveillance of linked international and domestic markets.

Speed is essential in monitoring information for market surveillance purposes. The advent of sophisticated algorithmic trading strategies, combined with high speed data connections, has changed the structure of markets. Trading strategies based on microsecond positions that are quickly terminated potentially may allow for intra-day abusive trading schemes. It follows that market monitoring should be based on automated electronic methods, such as automated trading alerts. Subsequently, collected data should be analyzed to detect possible intra-day trading abuses.

Discussion

Traditionally, surveillance of physical delivery commodity futures markets has focused on issues of market power at expiration. That focus reflects the fact that physical delivery futures contracts are most susceptible to manipulation when the deliverable supply on such contracts is small relative to the size of positions held by traders, individually or in related groups, as the contract approaches expiration.⁷²

In order to address these concerns, relevant Market Authorities traditionally have focused on ensuring that a balance between long and short positions is not disrupted throughout the trading months and in particular, generally heighten scrutiny as a contract approaches delivery. Relevant Market Authorities generally monitor end-of-day positions in markets and, through the use of large trader identification techniques (discussed later in this Report); will contact the holders of any large concentrations to ascertain the intentions of a suspect trade. Pertinent questions that address this concern in physical delivery markets include:

- Are the positions held by the largest long traders greater in size than deliverable supplies not already owned by such trader(s)?
- Are the long traders likely to demand delivery?
- Is taking delivery the least costly means of acquiring the commodity?
- To what extent are the largest short traders capable of making delivery?
- Is making futures delivery a better alternative than selling the commodity in the cash market?
- Does the futures price, as the contract approaches expiration, reflect the cash market

⁷² For example, in June 2010 the UK Financial Services Authority fined a commodity broker for market abuse and banned the broker from working in the financial services industry. The broker deliberately manipulated the market in London International Financial Futures and Option Exchange (LIFFE) traded coffee futures and the related coffee futures options. Implementing a plan previously developed with his client, the broker executed trades during a one minute period of trading in order to increase artificially the price of coffee futures. FSA/PN088/2010 *FSA fines and bans commodity broker for market abuse*, 2 June 2010, available at: <http://www.fsa.gov.uk/pages/Library/Communication/PR/2010/088.shtml>.

value of the deliverable commodity?

- Is the cash price series representative of physical commodity market transactions that have taken place and may or may not be reported to a price reporting agency?
- Is the price spread between the expiring future and the next delivery month reflective of underlying supply and demand conditions in the underlying physical commodity market?

An excellent barometer for potential liquidation problems is the basis relationship (i.e., the difference between cash and futures price). When the price of the liquidating future is abnormally higher than underlying physical commodity prices or comparable futures prices, or both the futures and underlying physical commodity prices are abnormally higher than comparable prices there is ample reason to examine the causes and to assess the motives of traders holding sizable, long futures positions.

Since manipulation of the cash market can yield a profit in the futures contract, relevant Market Authorities' staff should monitor large reportable futures positions and be alert for any unusual cash market activity on the part of large futures traders. This is especially the case during the time that the final cash price for futures settlement is determined. Additionally, as stated previously, the surveillance emphasis in cash-settled contracts is on the integrity of the cash price series used to settle the futures contract.

Examples of some pertinent surveillance questions for these markets are:

- As the futures contract expiration approaches, is the cash price moving in a manner consistent with supply and demand factors and with other comparable cash prices, which are not used in the cash-settlement process?
- Do traders with large positions in the expiring future have the capacity and ability to affect the cash price series used to settle the futures contract?
- What information can be obtained from the organization that compiles the cash price series regarding how the price is determined?
- Is anyone reporting prices that appear to be out of line with prices reported by others? If yes, can it be determined that the party reporting those prices holds a futures position that would benefit by those prices?

Finally, the continued technological evolution of markets and an increase in the number and composition of traders who participate in commodity derivatives markets (i.e., the *financialization* of commodity markets) carry many benefits (e.g., greater liquidity, which in turn provides greater hedging opportunities at lower costs). However, they also broaden the opportunities for abusive or manipulative trading.

Relevant Market Authorities in general have responded to the evolution of markets by similarly evolving their market surveillance techniques and routinely employing real-time monitoring procedures, including automated alerts, and analyzing data on a T+1 basis.

In the case of high frequency trading (HFT), in which positions may be entered and closed tens

of thousands of times during a trading session, relevant Market Authorities should adopt surveillance technologies that are capable of identifying, within an intra-day time frame, abusive trading that is conducted on a high frequency basis. Relevant Market Authorities should have adequate tools to analyze the data, including the order book, trade executions, and intra-day prices, to identify the unique characteristics of disruptive trading by HFT. After identifying what abusive HFT looks like, the abuses may be easier to monitor and prevent.⁷³

Authority to Access and Collect Information and the Types of Information that are Needed for the Surveillance of Physical Commodity Derivatives Markets

Principle 12: Authority to Obtain Information – *Relevant Market Authorities should have the authority to obtain information on a routine and non-routine basis for regulated commodity derivatives markets as well as the power to obtain information on a market participant’s positions in related over-the-counter (OTC) commodity derivatives and the underlying physical commodity markets. In particular, relevant Market Authorities should have the power to:*

- i) obtain information that allows the reconstruction of all transactions on a regulated commodity derivatives market (audit trail);*
- ii) obtain information that permits them to identify large positions (i.e., “large exposures” or “concentrations”) and the composition of the market in question;*
- iii) obtain information, if needed, on the size and beneficial ownership of positions held by a market participant in order to aggregate positions held under common ownership and control;⁷⁴*
- iv) obtain information about a market participant’s transactions and positions in related OTC and physical commodity markets; and*
- v) take appropriate action where a commodity derivatives market participant does not make requested market information⁷⁵ available to the Market Authority.*

Relevant Market Authorities should review the scope of their authority to obtain such information, and if necessary, to request such power from the relevant legislature or other appropriate governmental bodies.⁷⁶

For physical commodity derivatives markets, information is a critical tool for maintaining fair and orderly markets and ensuring market integrity.⁷⁷ Information about transactions permits a

⁷³ See, in this regard, *FR09-11 Regulatory Issues Raised by the Impact of Technological Changes on Market Integrity and Efficiency*, October 2011.

⁷⁴ See Section 13.7, 3, first sentence, *Objectives and Principles of Securities Regulation*, Report of the Executive Committee of IOSCO, February 2008, available at: <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD265.pdf>.

⁷⁵ Such as requests for related OTC and physical commodity market positions or clarification of the end-beneficiary to a trade to determine positions that may be held under a common ownership or control.

⁷⁶ See *Task Force on Commodity Futures Markets*, Final Report, IOSCO, March 2009, fn 6

⁷⁷ For further information on the types of information useful to manage price readjustment or volatility in a particular contract, see IOSCO report *Guidance on Information Sharing* (1997).

relevant Market Authority to detect customer and market abuses. Information about futures, and related OTC and physical market positions, as appropriate, allows the relevant Market Authority to identify large positions which could potentially result in a disorderly market or relate to market abuse, evaluate the overall composition of the market and to assess its functioning.

For on-exchange transactions, relevant Market Authorities should be able to collect on a routine and regular basis information on pricing of contracts throughout the trading day in real time, daily transactional information, daily reports of end-of-day positions held by market intermediaries (and by other market participants), where the size of the position is above a specified level (“large position”). The information should permit the Relevant Market Authority to identify each position holder (by name or code) down to the first customer level, and the size of position, by contract month, for each position holder.

Obtaining this information is particularly critical during periods of significant and abrupt price movements (e.g., high price volatility) to determine whether a market is functioning properly.

Obtaining position information also enables the relevant Market Authorities to understand the composition of the market and to analyze the participation of various classes of traders such as commercial and non-commercial market participants.

To determine large concentrations of positions and thereby apply position limits and carry out position management, relevant Market Authorities must have powers to obtain information from market members that enable the relevant Market Authority to determine positions that are held under common ownership and control. Relevant Market Authorities should consider position limits when a market participant, or several market participants, build such large positions that may destabilize the commodity derivatives markets.

A broker’s direct client (i.e., first customer level) who signed the account documentation in reality may be operating on behalf of an unknown person who controls the account (the beneficial owner). A relevant Market Authority must be able to identify such a beneficial owner in order to aggregate positions and to identify positions under common ownership or control. Brokerage policies generally require the broker’s direct client to disclose only its immediate beneficial owners (i.e., the client’s immediate controlling person). However, such disclosure may not reveal additional layers of control. In order to obtain the identity of an account’s ultimate owner, a relevant Market Authority might need to request information from successive layers of beneficial owners. A variety of powers may be necessary to accomplish this, such as the power to order a market to trade for liquidation only with respect to a trader’s positions if the trader does not provide the requested information or the use of subpoena power by an appropriate authority to require the production of the requested information.

The development of trade repositories for OTC instruments will facilitate access to previously opaque OTC transaction data. The availability of OTC transaction data should prompt relevant Market Authorities to evaluate the scope, frequency and utility of accessing such information through their members. Relevant Market Authorities should continue to monitor the development of international guidance in this regard.⁷⁸

⁷⁸ See, e.g., Report On OTC Derivatives Data Reporting and Aggregation Requirements <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD366.pdf>

Principle 13: Collection of Transaction Information on Commodity Derivatives Transactions and Positions for Market Surveillance – *In respect of commodity derivatives transactions and positions, a relevant Market Authority should consider what information it should collect on a routine basis and what it should collect on an “as needed” basis. A relevant Market Authority that has access to a relevant Trade Repository’s (TR) data should take such broader access into account, as well as its statutory obligations with respect to the TR, in constructing its data collection policies.*

Information could include, as appropriate:

For information collected on a routine basis:

- i) transactional information including time and date of transaction, contract terms, counterparties to the contract and price of contract; and*
- ii) position information.*

For information collected on an “as needed” basis:

- i) delivery intentions;*
- ii) beneficial owners;*
- iii) positions under common control; and*
- iv) for contracts other than forwards, additional information may also need to be sought on notional values, replacement cost, valuation methodology or duration of the contracts.⁷⁹*

Discussion - Access to Obtain and Collect Information

For on-exchange and related OTC transactions, relevant Market Authorities should have authority to collect non-routine information including information from authorized firms about the identity of the traders and the beneficial owners of commonly owned or controlled positions.

Information may also be sought about the existence, size and nature of a related physical commodity or OTC position (including for example whether part of a hedge, arbitrage or other risk management strategy), about the granting of credit to and utilization of credit by customers and about delivery intentions.

With respect to a market participant’s positions on over-the-counter (OTC) commodity derivatives and the underlying physical commodity markets, Relevant Market Authorities

⁷⁹ Warehouse stocks and verifiable deliverable supply reveal the quantities truly available for delivery when the contract terminates with open positions (that are not closed out). Market surveillance uses this information in the days preceding contract termination to verbally communicate with traders to reduce or close out large positions to ensure that the contract terminates in an orderly manner. Surveillance staff can also detect potential manipulation (squeezes and corners) by checking the trading positions for holders of large warehouse stocks and supplies.

should obtain information in specific instances, when demanded under a particular investigation.

Where appropriate, relevant Market Authorities should also obtain information on warehouse stocks or other deliverable supply. Obtaining information about physical commodity market transactions is important to ascertain a market participant's delivery intentions with regard to an exchange-traded contract as well as to understand the effect of such physical market transactions on price formation in the physical market. Access to physical market transaction data, both physical spot market for immediate delivery and forward contracts calling for delivery in the immediate future, is important for market surveillance to assess the reliability of price indexes.

For omnibus accounts, information should be collected to appropriately identify ultimate beneficiaries or positions under common control. To obtain the identity of an account's ultimate owner/controller, a relevant Market Authority might need to request information from successive layers of market participants who may be acting as beneficial owners.⁸⁰ A variety of powers may be necessary to accomplish this, such as a rule that requires a market participant to disclose whether, and if so, for whom, it is acting as a beneficial owner.⁸¹

The goal of improving the ability of the relevant Market Authorities to obtain potentially useful information is not a blanket recommendation for the general imposition of mandatory routine reporting requirements. However, regulators may need the authority to collect information from parties not participating directly in regulated commodity derivatives markets for surveillance or enforcement purposes (e.g., investigations into market abuse).

The objective of obtaining additional trader data across all markets is to reduce informational gaps. Therefore, the intention is not for the data to be used to conduct market surveillance of those markets outside direct regulatory scope, but rather to determine whether or not potential manipulation or other market abuses may be taking place in the regulated commodity futures markets. Market surveillance is resource sensitive, although it is generally neither physically possible nor necessary to scrutinize every trade, or every position, to form an understanding of market activity. However, in an investigation for market manipulation, it may often be necessary to reconstruct the entire trading record.

Principle 14: Large Positions – *Relevant Market Authorities should require the reporting of large trader positions for the relevant on-exchange commodity*

⁸⁰ In cases where omnibus accounts are used by an intermediary "A", the intermediary's omnibus account is the "first level" customer of the clearing firm "B." The omnibus account information submitted by the clearing member "B" to a Market Authority therefore will show only the aggregate positions held in the omnibus account owned by intermediary "A." (the clearing member's client). However, information on the individual holdings of the intermediary's individual clients could be obtained by accessing the information directly from the omnibus account owner "A." Nothing in this Report should be interpreted as requiring an omnibus account to be structured so as to disclose separately to the clearing member in the ordinary course of business the individual clients who submitted the trades for execution.

⁸¹ See, e.g., CFTC Part 18 reports by traders which require a reporting trader to identify each person who controls the trading of the reporting trader and to identify the names and locations of all firms which carry accounts owned or controlled by the reporting trader. If a reporting trader does not submit such information, CFTC rule 21.03 (f) authorizes the CFTC to notify the relevant exchange of such non-compliance with its request for information and the exchange "shall prohibit" the execution of transactions unless such trades offset existing open contracts (i.e., trade for liquidation only).

derivatives contracts. Relevant Market Authorities should have the ability to aggregate positions owned by, or beneficially controlled on behalf of, a common owner.

To identify the buildup of concentrations of positions that could result in congestion or price distortion or evidence a possible manipulation or other abusive trading, the relevant Market Authorities must be aware of large positions and their owners (including positions owned or controlled by a third party on behalf of such true owner) and may need additional information on related OTC and physical market positions. Obtaining such information across these markets assists the relevant Market Authorities in determining a large trader's intentions in respect of a particular commodity. As described in greater detail under Principle 15 and Principle 16 below, the relevant Market Authorities should use the information of a large position to possibly set relevant position limits to help mitigate any possible price distortions.

This Principle should not be interpreted as limiting the reporting procedures that relevant Market Authorities may implement as long as the objective of identifying and monitoring large concentrations is achieved. For example, the Principle can be met by *ad hoc* reporting by traders holding a large position to a Market Authority. Similarly, it could be met (1) where the owners and beneficial owners of each trading account are reported to a relevant Market Authority (e.g., an exchange) at the time of account opening and (2) the relevant Market Authority receives reports from the clearinghouse or clearing members of ongoing transactions and/or clearing data that allow the relevant Market Authority to identify large account holders on an aggregated basis and monitor large concentrations.

The determination of what constitutes a "large position" should be made by the relevant Market Authority acting within its discretion, taking into account the size and composition of the market in question. It follows that not every market will have the same exposure monitoring needs, trigger levels or approach to monitoring. Relevant Market Authorities should establish qualitative or quantitative criteria that are used to identify such large exposures (trigger levels).⁸² The relevant Market Authority should ensure that the definition of large positions and any "trigger" levels are made clear to market participants.

Discussion

Identifying Large Positions

The relationship between the size of a position, the trading intention behind it and the owner is of vital importance in the relevant Market Authority's decision-making process with regard to a large position. The justification for holding a large position may well rest on the business function of the owner. A commercial market participant with large delivery commitments may well be able to justify a large position in a commodity derivatives contract, but a non-commercial market participant with a similar position may find it more difficult to argue the case. Therefore, relevant Market Authorities should have mechanisms (e.g., reporting, monitoring) in place to ensure that they are fully aware of the large positions in existence, the owner of the positions and the reasons for the positions. A relevant Market Authority should have procedures in place to alert it to all positions held by any market participants which breach pre-determined levels.

These levels will necessarily vary between different markets and contracts and should be subject

⁸² See 13.7 *Objectives and Principles of Securities Regulation*, IOSCO, February 2008, fn 52.

to regular review to ensure that they are appropriate for prevailing market conditions. It may well be that a market participant with malign intent might seek to conceal from the relevant Market Authority his intentions and therefore hold positions across a number of market members. Reportable position levels should therefore be set at a level well below levels which might represent a threat to the integrity of the market. However, relevant Market Authorities should not be constrained in their actions by pre-determined reportable levels.

Identifying positions under common ownership and control - Aggregation

The ability to identify and aggregate positions that are owned or controlled or guaranteed by a common owner is critical to determining accurately “large positions.” For example, it is not unusual for a large corporation to have multiple trading operations trading independently for different purposes (e.g., commercial hedging, proprietary trading, and non-commercial trading). Yet those positions are ultimately under common ownership and control or subject to the entities credit and should be aggregated for purposes of identifying and responding to a large position.

To enable efficient identification of positions on an aggregated basis, relevant Market Authorities should be able to access information as to the name of the owner of each reportable position. Further, commodity derivatives markets should prohibit market participants trading under fictitious names or acting undisclosed for a third party unless such trades are executed anonymously on a trading platform subject to trading platform rules regarding give-up arrangements or a block trade conducted through a blockhouse. Market Authorities should adopt effective mechanisms that will enable them to identify such common ownership or control.

The fulfillment of the G-20 Commitments with respect to OTC derivatives will result in the availability to the relevant Market Authorities of increased data on OTC transactions. Relevant Market Authorities should therefore evaluate means to incorporate this OTC data into their market surveillance programs, including into their approaches for identifying large concentrations. This will require relevant Market Authorities to determine whether a particular futures contract should be aggregated with a similar OTC derivatives contract for purposes of applying position management including position limits to such a common derivatives position. Relevant Market Authorities should monitor the ongoing development of international⁸³ and national initiatives⁸⁴ that might be instructive in this regard.

To better understand the composition of the market, relevant Market Authorities should consider adopting a system of internationally consistent account classifications for international markets that have significant cross-border impacts to distinguish the various types of trading, such as commercial trading. The analysis of such classifications is complex. For example, a trader may be classified as a commercial in some commodities and as a non-commercial in another. Moreover, these classifications may change quickly over time.

⁸³ See *Report on OTC Derivatives Data Reporting and Aggregation Requirements*, CPSS-IOSCO, August 2011, fn 25.

⁸⁴ See, e.g., CFTC final regulations regarding large trader reporting for physical commodity swaps, 76 Federal Register 43851 (July 22, 2011), CFTC Regulations Part 20, which among other things proposed criteria to identify a subset of swaps (“paired swaps”) that are economically-equivalent to related futures contracts. Such criteria will be necessary to permit the application of position limits on an aggregated basis across a market participant’s futures and swaps positions.

Although such standardization would facilitate analysis across a jurisdiction's markets, any analysis of global markets would require that data sets be comparable internationally. The relevant Market Authorities should consider the utility and feasibility of harmonizing reporting classifications in order to achieve such comparable data sets.

Chapter 6 Principles to Address Disorderly Commodity Derivatives Markets

A. Introduction

With respect to derivatives markets, an orderly market may be characterized by, among other things, parameters such as a rational relationship between consecutive prices, a strong correlation between price changes and the volume of trades, accurate relationships between the price of a derivative and the underlying commodity and reasonable spreads between near and far dated contracts. Numerous conditions can negatively affect trading and the characteristics of an orderly market, ranging from technical errors in the trading system, “fat finger” mistakes, overreactions to major news or rumors such as embargoes or natural disasters that might affect supplies of commodities, or an unmanaged imbalance between long and short positions resulting from large, concentrated positions.

The IOSCO Principles state that one of the key objectives of regulation is to ensure that markets are fair, efficient and transparent.⁸⁵ The IOSCO Principles address these concerns in the context of organized markets through the Principles relating to Secondary Markets.⁸⁶ Those Principles require, among other things, that trading systems be subject to regulatory authorization and continuing oversight prevails as a means to ensure fair and orderly markets,⁸⁷ regulation should be designed to detect and deter manipulation and other unfair trading practices,⁸⁸ and regulation should aim to ensure the proper management of large exposures, default risk and market disruption.⁸⁹ The specific application of these Principles is further refined in IOSCO’s Methodology for Assessing Implementation of the IOSCO Objectives and Principles of Securities Regulation.⁹⁰

Additionally, IOSCO has produced numerous reports, which discuss the specific application of various regulatory tools such as trading halts, error trade policies and electronic access controls as a means to address disorderly markets.⁹¹ Those reports, which have general application to all

⁸⁵ *Objectives and Principles of Securities Regulation*, IOSCO, June 2010, fn 18.

⁸⁶ *Ibid* Principles 33 through 38.

⁸⁷ *Ibid* Principles 33 and 34.

⁸⁸ *Ibid* Principle 36.

⁸⁹ *Ibid* Principle 37.

⁹⁰ *Methodology for Assessing Implementation of the IOSCO Objectives and Principles of Securities Regulation*, Executive Committee of IOSCO, February 2008 – Internal Document.

⁹¹ See *Principles for Direct Electronic Access to Markets*, Final Report of the Technical Committee of IOSCO, 12 August 2010), available at: <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD332.pdf>;

See *Policies on Error Trades*, Report of the Technical Committee of IOSCO, October 2005, available at: <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD208.pdf>;

See *Trading Halts and Market Closures*, Report of the Technical Committee of IOSCO, October 2002, available at: <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD138.pdf>;

See *Screen-Based Trading Systems for Derivatives Products*, Report of the Technical Committee of IOSCO, June 1990, available at: <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD6.pdf>; and

See *Principles for the Oversight of Screen-Based Trading Systems for Derivative Products-Review and Additions*, Report of the Technical Committee of IOSCO, October 2000, available at: <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD111.pdf>.

markets, both equity and derivatives, should be consulted, as the purpose of this Report is not to revisit issues of general application to markets.⁹²

Accordingly, this Report focuses on regulatory tools to address disorderly markets that are particularly relevant to commodity derivatives markets.

B. Principles to Address Disorderly Commodity Derivatives Markets

Principle 15: Intervention Powers in the Market – *Relevant Market Authorities should have, and use, effective powers to intervene in commodity derivatives markets to prevent or address disorderly markets and to ensure the efficiency of the markets. These powers should include the following:*

1) Position Management Powers, Including the Power to Set Position Limits – *Relevant Market Authorities should have and use formal position management powers, including the power to set ex-ante position limits, particularly in the delivery month.*

These should necessarily include position management powers that:

- i) Establish a trader's automatic consent to follow an order of the relevant Market Authority when that trader's position reaches a defined threshold size or any size, which the relevant Market Authority considers prejudicial to orderly market functioning, taking into account all relevant circumstances. They should also require such a trader to comply with the relevant Market Authority's order, either not to increase a position or to decrease a position; and*
- ii) Authorize a relevant Market Authority to place ex-ante restrictions on the size of a position a market participant can take in a commodity derivatives contract (i.e., position limits).*

2) Other Discretionary Powers – *Relevant Market Authorities should also have the powers to employ any of the following measures, as appropriate to address market disruption or the perceived threat of such disruption or to assist market surveillance efforts:*

- i) the imposition of price movement limits;*
- ii) calling for additional margin, either from customers or from clearing members on behalf of their clients;*
- iii) ordering the liquidation or transfer of open positions;*
- iv) suspending or curtailing trading on the market (e.g., trading halts and circuit breakers);*
- v) altering the delivery terms or conditions;*
- vi) cancelling trades;*

⁹² See CR02/11 *Regulatory Issues Raised by the Impact of Technological Changes on Market Integrity and Efficiency*, July 2011, fn 6. which addresses the impact of technology such as high frequency trading on markets.

- vii) *requiring owners of positions to specify delivery intentions; and*
- viii) *requiring traders to disclose related OTC derivatives or large physical market positions.*

Disorderly conditions in physical commodity derivatives markets can have significant negative effects on national economies. Accordingly, it is critical that the relevant Market Authorities have the necessary powers to intervene in the markets to address disorderly conditions. In particular, there should be a credible use by relevant Market Authorities of powers to stabilize markets should disorderly conditions exist, including by ordering market participants to reduce the levels of their positions if that outcome is deemed necessary by the relevant Market Authority.⁹³ The flexibility provided by position management powers, which includes the use of position limits, to intervene where specific circumstances so require is an effective way of preventing manipulation and disorderly markets arising from large positions (e.g., amassed close to the settlement date of physical delivery), especially concerning participants that are not hedging their positions in the physical markets.

Discussion

Relevant Market Authorities have developed a range of approaches to address the fundamental principle that they must be empowered to take action over positions of potential concern to orderly markets, of potential manipulation or for any other reason they reasonably judge appropriate. The evolution of these approaches inevitably reflects a relevant Market Authority's applicable legislation or rules,⁹⁴ its market philosophies, regulatory experiences and business practices. The powers enumerated in the above Principle reflect those powers that relevant Market Authorities have found to be appropriate to deal with disorderly markets.

It is not enough, of course, to merely have a catalog of powers, they must be used where appropriate. What is most important however is for the relevant Market Authorities to use their surveillance capabilities in a coherent and ongoing manner to identify developing disorderly conditions and take action accordingly.

Position Management Powers, Including Power to Set Position Limits

The G-20 Finance Ministers called on IOSCO to include in its recommendations on regulation and supervision of derivatives markets “formalized position management powers, including the authority to set ex-ante position limits where appropriate among other powers of interventions”.⁹⁵

As used in this Report, the term “position management” refers collectively to both (1) the retention of discretionary power to respond to identified large concentrations, but without pre-

⁹³ The use of position management techniques, which include the power to set ex-ante position limits, is a mandatory requirement under this Principle. *See* Communiqué Meeting of Finance Ministers and Central Bank Governors, Washington, DC, 14-15 April 2011, available at: <http://www.g20.utoronto.ca/2011/2011-finance-110415-en.html>

⁹⁴ See, e.g., CFTC derivatives position limit final rule at: 86 *Federal Register* 3236, January 14, 2021, available at: <https://www.cftc.gov/sites/default/files/2021/01/2020-25332a.pdf>.

⁹⁵ See *Final Communiqué Meeting of Finance Ministers and Central Bank Governors*, Washington, DC, 14-15 April 2011, fn 5. For purposes of this Report, the term “position management” is used expansively to include the authority to set position limits. National jurisdictions may use different terminology.

determined restrictions on the size of positions that a market participant may own or control and (2) fixed position limits, which are predetermined absolute limits on position ownership in the spot or delivery month and/or in later months. Many jurisdictions employ both techniques, with the main differences between them being where the emphasis lies.

The use of position management, including position limits, is well established in organized future markets as a means to address the potential for large positions in commodity futures and options markets to prejudice orderly market functioning. This is because the capacity of a market to absorb the establishment and liquidation of large positions in an orderly manner is related to the size of such positions relative to the market and the market's structure and is not unlimited.⁹⁶

There is a temporal element to be considered when addressing this problem. Specifically, futures contracts are most susceptible to manipulation when the deliverable supply on such contracts is small relative to the size of positions as the contract approaches expiration and open interest generally becomes progressively smaller. The more difficult and costly it is to augment deliverable supplies within the time constraints of the expiring futures contract's delivery terms, the more susceptible to manipulation and congestion the contract becomes.

When large positions are amassed in a contract, or contract month – sometimes with manipulative intent – the potential exists for unreasonable and abrupt price movements should the positions be traded out or liquidated in a disorderly manner. Trading under such conditions can result in greater volatility than would otherwise prevail if traders' positions were more evenly distributed among market participants. Although this risk exists throughout the life of a contract, it is highest when a deliverable contract approaches its expiration.⁹⁷ Contracts that are cash settled do not necessarily avoid this risk. This is because arbitrage implies that cash settled contracts will settle at, or very near, the price of the underlying at the time of expiration. Hence, a participant controlling a significant portion of the available inventory or available delivery of such inventory can influence the cash price by either of two routes. By not selling, supplies available to the market are made scarce and prices are expected to rise. Alternately, by threatening to sell a large amount, available supply increases and prices will fall. The incentive for this inventory holder to exert those influences will increase with the extent of the futures positions held.

Establishing a trader's automatic consent to follow an order to reduce a position

One position management approach establishes a trader's automatic consent to follow an order of the exchange when that trader's position reaches either a defined threshold size or any size which the relevant Market Authority considers may be prejudicial to market functioning, taking account of all relevant circumstances. This approach requires such a trader to comply with the exchange's order, either not to increase a position or to decrease a position. This approach represents the application of the principle that the relevant Market Authorities should be empowered to take action over any position of potential concern.

In many jurisdictions, the relevant Market Authorities apply this approach to all positions on

⁹⁶ See, e.g., CFTC derivatives position limit final rule at 86 *Federal Register* 3236, January 14, 2021, available at: <https://www.cftc.gov/sites/default/files/2021/01/2020-25332a.pdf>.

⁹⁷ See 9.7, p. 32 *Reforming OTC Derivatives Markets: A UK Perspective*, FSA/HM Treasury, December 2009, available at: http://www.fsa.gov.uk/pubs/other/reform_otc_derivatives.pdf.

the commodity market, although in certain jurisdictions this is refined to apply to all positions which exceed a pre-determined accountability limit. Typically, the market's rules give exchanges the authority to manage positions at any time during the contract's life cycle and to instruct a member to close or reduce a position with the exchange, if that is necessary, to secure fair and orderly markets. If the exchange member does not comply, the exchange has the power to close the position unilaterally.⁹⁸ In many jurisdictions, the exchange's discretion to act is subject to the overriding authority of the governmental Market Authority, which is empowered to force the exchange's hand in cases where the governmental Market Authority considers action should be taken. The governmental Market Authority also uses its authority over regulated market participants, such as intermediaries, to enforce actions relating to positions directly.

Position Limits

In certain jurisdictions the approach to addressing positions of potential concern has gravitated towards pre-determined fixed position limits, particularly in the delivery month. The imposition of fixed position limits is viewed primarily as a tool that seeks to prevent market concentration in advance by establishing set limits of non-commercial involvement in a contract at various months of the contract's trading cycle. Typically, there are three elements of a position limit regime: the levels of the limits, the exemptions from them (in particular for hedgers) and the policy on aggregating accounts. Limits are generally set in reference to historical levels of the open interest in a contract. As noted above, the temporal nature of a contract's susceptibility to manipulation or congestion ordinarily results in different limits as applied to the "spot" month and other future maturities. Some approaches combine the application of fixed position limits in the spot month with position management in farther out months.

A fixed position limit regime generally requires classification of market participants into commercial and non-commercial categories, analysis of a contract's historical open interest and exemptions from those limits for hedging by *bona fide* commercial users of the commodity contract in question.

Finally, because position limits essentially are concerned with limiting market concentration, an effective position limit regime must have an effective mechanism to identify and aggregate positions that are owned or controlled by a common owner, as required by the Principle on Large Positions.

Market Authorities should use their position management powers to address disorderly markets

In order to manage large concentrations in commodity derivatives markets, the relevant Market Authorities should have and use formal position management powers, including the power to set ex-ante position limits. The decision to rely on fixed ex-ante position limits or the power to establish a trader's consent to follow an order of the exchange or a combined approach as the primary mechanism to address position concentrations and disorderly markets,⁹⁹ will

⁹⁸ Ibid at 9.12 – 9.15.

⁹⁹ In the United States, the framework for addressing threats of manipulation and congestion has included both federally mandated position limits in certain contracts, position limits in other contracts fixed by exchanges and (since 1991) position accountability exemptions. See CFTC derivatives position limit final rule at 86 *Federal Register* 3236, January 14, 2021, available at:

inevitably reflect a relevant Market Authority's applicable legislation, or rules, its market philosophies, regulatory experiences and business customs and practices.

The Task Force concludes therefore that it is appropriate for all Market Authorities to adopt and use position management, including the power to set position limits, *particularly in the delivery month where appropriate*, among other powers of intervention.¹⁰⁰ In practice, the relevant Market Authorities have used a combination of the two approaches, with differences in *emphasis*. Regardless of the approach taken, there should be a credible use by the relevant Market Authorities of powers to stabilize markets should disorderly conditions exist, including by ordering market participants to reduce the levels of their positions if that outcome is deemed necessary by the relevant Market Authority.

Price Limits and Trading Halts

Price limits, which set boundaries for daily price moves, price-quality bands, trading halts and circuit breakers¹⁰¹ have been used by markets to address market volatility.

Market Authorities may adopt price limits, trading halts and circuit breakers to:

- 1) reduce or constrain price movements in a trading day that are perceived by the relevant Market Authorities as not being reflective of true market conditions, but might be caused by traders overreacting to new information;
- 2) provide a cooling off period for futures market participants to respond to *bona fide* changes in market supply and demand fundamentals that would lead to large cash and commodity derivatives contracts price changes;
- 3) allow additional time for the collection of margins in times of large price movements;
- 4) prevent excessive collateral damage to other market participants who base their trading on market levels created through error¹⁰²; and
- 5) enable the relevant Market Authorities to develop appropriate responses in the circumstances.¹⁰³

<https://www.cftc.gov/sites/default/files/2021/01/2020-25332a.pdf>.

¹⁰⁰ The Task Force notes that the Committee of European Securities Markets Authorities (now the European Securities Market Authority (ESMA)) in its technical advice to the European Commission in connection with the Commission's review of MiFID also reached the conclusion that it is appropriate for Market Authorities to adopt position management powers. The Task Force also notes the proposal of the European Commission within its public consultation on the MiFID review (December 2010) to amend the framework directive to grant a heightened form of position management, to introduce greater coordination at EU level in the application of those powers and to allow for the adoption of implementing measures setting ex-ante position limits both for derivative contracts traded on exchange and OTC (p.83), in line with the US framework.

http://www.esma.europa.eu/index.php?page=document_details&from_title=Documents&id=7279
https://ec.europa.eu/finance/consultations/2010/mifid/docs/consultation_paper_en.pdf.

¹⁰¹ For a detailed review of these mechanisms, see FR09/11 *Effectiveness of Market Interventions in Emerging Markets*, Report of Emerging Markets Committee of IOSCO, 15 October 2010, available at: <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD333.pdf>.

¹⁰² See *Policies on Error Trade*, IOSCO, October 2005, fn 69.

¹⁰³ Some US Market Authorities also have rules for the automatic expansion of the daily price limit after consecutive days of limit bid/offer prices. Some electronic trading platforms also have "reasonability tests" and/or "price bands" for order entry, which do not allow an order to enter the trade matching

If price limits are adopted, they should be set at levels that are not overly restrictive in relation to price movements in the physical market.

Principle 16: Unexpected Disruptions in the Market - Relevant Market Authorities should have a process to respond to unexpected disruptions in commodity derivatives markets and the power to intervene, as necessary, in order to restore orderly markets in the event of an unexpected disruption and ensure market participants have a process and adequate plans to address unexpected disruptions.

Unexpected disruptions may occur in the commodity derivatives markets and can have unexpected and unforeseen impact on the proper functioning of the commodity derivatives markets. Such events may include various internal and external disruptions, such as IT, trading or communication system failures; cyber-attacks and system breaches; extreme price volatility due to COVID-19 or global financial crisis type events or manipulation of futures trading prices; settlement or delivery failures; war, terrorist or other attacks on critical sites; emergencies due to *force majeure* or natural disasters; global pandemics; change in law¹⁰⁴ and other abnormal conditions that may affect market dynamics, integrity, pricing which may result in suspension of trading activities.

In such circumstances, the relevant Market Authority, to the extent supported by relevant legislation, should use intervention powers to restore order and bring stability to the markets, as necessary to ensure market functioning. The relevant Market Authority should protect the rights and interests of market participants, minimize the adverse impact of the unexpected disruptions on the commodity derivatives markets, and where possible, try to isolate the potential market and contagion risks across different commodity derivatives markets while taking steps to avoid incentivizing higher risk-taking by market participants in anticipation of possible future market suspensions.

Discussion

Business continuity planning

To mitigate potential risks associated with unexpected disruptions, the relevant Market Authority should ensure that market participants have appropriate BCPs in place to address these.¹⁰⁵ The relevant Market Authority should ensure that firms update and test their BCPs regularly.

system if it is outside a predetermined price range or is of a particularly large size.

¹⁰⁴ Change in law events may cause disruptions affecting market dynamics and pricing and consequentially having an impact on the functioning of such markets. For example, the price of biofuels is roughly based on carbon intensity. The demand for fuels with low carbon intensity increases as low carbon fuel standard regulations require further reductions of carbon intensity for transportation fuels within the regulatory regime's jurisdiction. Changes in market design in electricity markets have also affected market dynamics and pricing.

¹⁰⁵ *Mechanisms for Trading Venues to Effectively Manage Electronic Trading Risks and Plans for Business Continuity* at: <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD522.pdf>
Market Intermediary Business Continuity and Recovery Planning at: <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD523.pdf>
Principles on Outsourcing at: <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD687.pdf>

The relevant Market Authority should have an understanding of how the market participants may respond to unexpected events and ensure that they have adequate BCP arrangements in place. Where possible, the relevant Market Authority should identify any potential gaps or risks that may not have been considered or contemplated by market participants in their BCP.

Regulatory information sharing and coordination during unexpected disruptions

Cooperation and information sharing arrangements between relevant Market Authorities are crucial during unexpected disruptions to ensure that risks are appropriately mitigated. It is important that the relevant Market Authority have protocols and/or plans in place outlining how to share information and coordinate regulatory measures and actions with other relevant Market Authorities domestically and in other jurisdictions.

Principle 17: Review of Evolving Practices – *Relevant Market Authorities should have, or contribute to, a process to review the perimeter of regulation to ensure that they have the power to address evolving trading practices that might result in a disorderly market. Exchanges and self-regulatory organizations play a critical and complementary role with governmental regulators in identifying such practices.*

The dynamic nature of markets requires relevant Market Authorities to assess whether their existing policies are adequate to address changing market structures, trading technologies and practices. Relevant Market Authorities should therefore review their existing powers in light of changing market conditions and, if necessary, seek additional powers as appropriate.

Discussion

IOSCO Principle 7 requires a regulator to have or contribute to a process to review the perimeter of regulation regularly.¹⁰⁶ In this connection, concerns have been raised by regulators that new trading technologies, such as HFT, and specific methods (e.g., spoofing or bidding or offering with the intent to cancel the bid or offer before execution, the order not submitted as part of a legitimate, good-faith attempt to consummate a trade) may foster conditions that inadvertently result in market disruption, which may not fall within existing prohibitions or rise to the level of intentional abuse, but nonetheless disrupt trading (disruptive practices).¹⁰⁷

In order to meet these evolving practices, relevant Market Authorities should review the adequacy of

¹⁰⁶ *Objectives and Principles of Securities Regulation*, IOSCO, June 2010, fn 18.

¹⁰⁷ See, e.g., Consultation paper: *Guidelines on systems and controls in a highly automated trading environment for trading platforms, investment firms and competent authorities*, European Securities and Markets Authority, 20 July 2011 available at: <https://www.esma.europa.eu/press-news/consultations/consultation-guidelines-systems-and-controls-in-highly-automated-trading>. A Joint CFTC-SEC Advisory Committee, which was created soon after the May 11, 2010 “flash crash”, examined emerging regulatory risks. The Advisory Committee published a report, which among other things, questioned whether it is ever appropriate to permit large order algorithms that employ unlimited use of market orders or that permit executions at prices which are a dramatic percentage below the present market price without a pause for human review. http://www.cftc.gov/ucm/groups/public/@aboutcftc/documents/file/jacreport_021811.pdf. See also, CFTC Antidisruptive Practices Authority, interpretive guidance and policy statement, May 28, 2013. Available at: <https://www.federalregister.gov/documents/2013/05/28/2013-12365/antidisruptive-practices-authority>.

existing prohibitions to ensure that they address evolving disruptive practices that a relevant Market Authority identifies and meet any relevant international guidelines. Such prohibitions might be developed that are market specific to take account of particular features of the underlying physical commodity, or more general to encompass the regulated market as a whole.¹⁰⁸

In carrying this Principle forward, there should be complementary efforts among relevant Market Authorities, including governmental regulators, SROs and markets. Governmental regulators should clearly articulate through rules any new prohibitions which require public input. Markets and other SROs, which have self-regulatory obligations to ensure orderly markets, should have the flexibility to adopt and adapt their own policies to address disruption of the market in question.

¹⁰⁸ See, e.g., CFTC Antidisruptive Practices Authority, interpretive guidance and policy statement, May 28, 2013. Available at: <https://www.federalregister.gov/documents/2013/05/28/2013-12365/antidisruptive-practices-authority>.

Chapter 7 Principles for Enforcement and Information Sharing

A. Introduction

This section addresses the powers that are needed to prohibit, investigate and take enforcement action against market abuses, as well as the need for information sharing among relevant Market Authorities. Traditionally, the application of such powers has taken place within the context of activities on an individual market. The Principles discussed in this section address this context. However, that one dimensional focus is not adequate to address the realities of abusive trading schemes, which involve conduct extending beyond an individual futures exchange to include conduct in the OTC derivatives markets and the underlying physical commodity markets. An effective response to these sophisticated multi-market abusive trading schemes demands an active and coordinated enforcement structure having the necessary powers to detect and address multi-market schemes. Each jurisdiction may need to evaluate its existing programs and legal authorities to ensure that its surveillance, enforcement framework and legal powers are adequate to address multi-market abuses.

B. Principles for Enforcement and Information Sharing

Principle 18: Rules and Compliance Programs – *Relevant Market Authorities should have rules, compliance programs, sanctioning policies and powers to prohibit, detect, prevent and deter abusive practices on their markets, including manipulation or attempted manipulation of the market. The rules and compliance programs should take account of the whole position of the market participant (i.e., all positions under common ownership and control). There should be clarity as to what constitutes manipulative, abusive conduct or other prohibited conduct.*

Specific practices which relevant Market Authorities should seek to detect and prevent include, among others:

- i) causing, or attempting to cause, artificial pricing in the market;*
- ii) creating a false or misleading appearance of active trading;*
- iii) disseminating false or misleading information in respect of the market or conditions that affect the price of any commodity;*
- iv) creating, or attempting to create, a corner or squeeze, in which an abusive controlling position is accumulated in the physical and/or futures or OTC markets, forcing those holding short positions to settle their obligations, by purchase or offset or otherwise, to their detriment;*
- v) abuse relating to customer orders;*
- vi) "wash trades", involving no change of beneficial ownership or economic purpose;*
- vii) collusive trades, which seek improperly to avoid exposure to the pricing mechanism of the market;*
- viii) violation of applicable position limits;*
- ix) concealment of a position holder's identity; and,*

x) *misuse of information.*

Relevant Market Authorities should make clear to market participants what constitutes manipulative, abusive conduct or other prohibited conduct. Relevant Market Authorities should have a compliance program that is structured to detect, deter and refer for enforcement action any prohibited conduct.

The reference to “misuse of information” is not intended to imply the application to listed commodity derivatives of insider trading principles that have been developed for securities. Regarding commodity derivatives, the focus in many jurisdictions has been on preventing the disclosure of information by exchange officials and government employees with access to certain information generated by virtue of their positions that is normally expected to remain confidential. Accordingly, misuse of information policies should take into account the functional differences between, and the relevant jurisdiction’s statutory treatment of, securities and commodity derivatives.¹⁰⁹

Discussion

The difference between aggressive trading and manipulation is a fine line: sometimes it may be necessary for supervisors to exercise subjective judgment in deciding whether a particular activity or behavior is detrimental to the majority of the market participants.

Because of this need to exercise subjective judgment, and in order to permit flexibility in preventing novel approaches to market abuses, some relevant Market Authorities might specify those activities which may impair fair and orderly markets; including examples of such activities, or their effects, which they consider relevant to assess manipulative or abusive conduct and to have in place specific rules which prohibit such actions.¹¹⁰ Relevant Market Authorities should also make clear that the fact that a particular practice is not explicitly stated does not limit a relevant Market Authority from determining that the practice is manipulative or abusive.

To ensure compliance with these rules, each authority should have in place mechanisms to identify

¹⁰⁹ For example, pursuant to Article 161 or 176 of the Commodity Derivatives Act in Japan, an officer or an employee of a Commodity Exchange or a Commodity Clearing Organization shall not divulge any confidential information he/she has learned during the course of his/her duties. Any person who violates this provision is liable to imprisonment of not more than one year or a fine of not more than five hundred thousand yen, under Article 366 of the CDA.

In the United States, prior to Dodd-Frank legislation, the Insider Trading provisions in Commodity Exchange Act (CEA) Section 9(c)-(d) prohibited employees of CFTC, SROs and markets regulated by CFTC from trading on or delivering to third parties non-public information generated from those entities. Section 746 Dodd-Frank legislation broadened the scope of prohibited conduct to include, among other things, “knowing use” by third parties who receive information imparted by any employee or agent of the federal government and knowingly use such information to enter into or offer to enter into a contract of sale of a commodity for future delivery, an option or a swap.

In the EU, the Market Abuse Directive contains the following definition of inside information for commodity derivatives that is applicable to all persons: “In relation to derivatives on commodities, ‘inside information’ shall mean information of a precise nature which has not been made public, relating, directly or indirectly, to one or more such derivatives and which users of markets on which such derivatives are traded would expect to receive in accordance with accepted market practices on those markets.”

¹¹⁰ See e.g., CFTC *Interpretative Guidance on Disruptive Practices* at 78 Federal Register 31890 (May 28, 2013). <https://www.cftc.gov/PressRoom/PressReleases/ssLINK/2013-12365a>

instances of non-compliance and a range of possible sanctions which act as an effective deterrent.

Principle 19: Framework for Addressing Multi-Market Abusive Trading and Powers and Capacity to Respond to Market Abuse - *Relevant Market Authorities should ensure that the regulatory framework for market surveillance and enforcement within a jurisdiction is structured to provide for active and coordinated detection and enforcement action against manipulative or abusive schemes that might affect trading on multiple trading venues and OTC markets, as well as the underlying physical commodity markets.*

Relevant Market Authorities should have adequate powers and capacity to investigate and prosecute actual or suspected market abuse, including attempted manipulation.

IOSCO members that are responsible for the oversight of commodity derivatives markets should have all of the powers required by the IOSCO Multilateral Memorandum of Understanding Concerning Consultation and Cooperation and the Exchange of Information (MMOU)¹¹¹. Dealing with multi-market abusive trading schemes might involve the inter-play among some combination of relevant Market Authorities (e.g., a futures market, a governmental regulator, an SRO, and physical market regulators) as well as civil or criminal authorities. Although there might be a division of responsibilities in a jurisdiction within and among regulatory agencies, markets and SROs, it is critical that a *coordinated* surveillance and enforcement effort be constructed that has sufficient resources and engages *actively* in a continuous effort to identify and take action against multi-market schemes. This will require the coordinated involvement of at least one relevant Market Authority that has the necessary governmental powers to investigate and take enforcement action against such multi-market schemes.

Discussion

Regulatory experience illustrates that a jurisdiction's surveillance and enforcement structure must be directed to detect and respond to increasingly sophisticated abusive or manipulative trading schemes that involve conduct extending beyond a particular futures exchange. For example, such schemes have involved the attempted manipulation of the physical market to affect the futures market,¹¹² and the submission of false trades to a price reporting agency or

¹¹¹ See *Multilateral Memorandum of Understanding Concerning Consultation and Cooperation and the Exchange of Information*, Report of the Executive Committee of IOSCO, May 2002, available at <http://www.iosco.org/library/pubdocs/pdf/ioscopd126.pdf>.

¹¹² In 2008, the CFTC announced that the Dairy Farmers of America, Inc. (DFA), its former Chief Executive Officer and its former Chief Financial Officer would pay a \$12 million civil monetary penalty for attempting to manipulate the Class III milk futures contract and exceeding speculative position limits in that contract. The Commission's DFA order finds that, from May 21 through June 23, 2004, the defendants attempted to manipulate the price of the Chicago Mercantile Exchange's (CME) June, July, and August 2004 Class III milk futures contracts through purchases of block cheddar cheese on the CME Cheese Spot Call market. The order finds that the pricing relationship between the CME block cheese market and the Class III milk futures market is well known throughout the industry, and the CME block cheese market price plays a significant part in establishing Class III milk futures prices. <https://www.cftc.gov/PressRoom/PressReleases/5584-08>

In 2008 the CFTC obtained a \$10 million civil monetary penalty in a consent order settling charges against *Energy Transfer Partners, L.P.*, of Dallas, Texas, and three ETP subsidiaries: *Energy Transfer Company*, of San Antonio and Houston; *Houston Pipeline Company*, of Houston; and *ETC Marketing, Ltd.*,

other actions taken in an attempt to manipulate energy price indexes and benefit positions on a futures exchange.¹¹³ These cases illustrate the importance of a jurisdiction's surveillance and enforcement structure for futures markets taking account of the possibility of manipulations taking place on physical commodity and OTC markets as part of a scheme to influence the futures markets.

Relevant Market Authorities should have adequate enforcement powers and capacity to deal with abusive practices on their regulated markets. Such powers should include:

- i) investigative and compulsory powers to obtain documents and information (including proprietary systems and software), take statements and/or question persons involved in suspected market abuse. These powers may be shared between authorities (where, for instance, an exchange has investigative powers against its members and wider investigative powers are remitted to a government body, including a public prosecutor

located in San Antonio and Houston. The defendants were charged with attempting to manipulate natural gas prices at the Houston Ship Channel (HSC) delivery hub. The CFTC's complaint alleged that from September 2005 to early December 2005, the defendants (1) attempted to manipulate the price of natural gas for delivery at the HSC by selling on the Intercontinental Exchange (ICE) massive quantities of natural gas at HSC to place downward pressure on natural gas prices at HSC; and (2) by reporting those transactions to *Inside FERC Gas Market Reports* (Inside FERC), attempted to manipulate the index price of natural gas at HSC that was calculated and disseminated by *Inside FERC* in its October and December 2005 monthly subscriptions. The complaint further alleged that the defendants engaged in this scheme in an attempt to benefit their financial basis swap positions tied to the *Inside FERC* October and December 2005 HSC natural gas index prices. The vast majority of the physical HSC natural gas transactions and the financial basis swaps at issue in the complaint were executed on The ICE. <https://www.cftc.gov/PressRoom/PressReleases/5471-08>

See also *CFTC vs. Parnon Energy Inc., Arcadia Energy (Suisse) SA*, May 2011, in which the CFTC alleges a cross-market trading scheme involving the accumulation and sell-off of a substantial position in physical crude oil to manipulate futures prices. Available at:

<https://www.cftc.gov/PressRoom/PressReleases/6041-11>

113

In December 2020, the CFTC issued an order filing and settling charges against Vitol Inc., an energy and commodities trading firm in Houston, Texas, for manipulative and deceptive conduct. The conduct, which spanned from 2005 to early 2020, involved foreign corruption and physical and derivatives trading in the U.S. and global oil markets, including attempted manipulation of two S&P Global Platts physical oil benchmarks. The order requires Vitol to pay more than \$95 million in civil monetary penalties and disgorgement. <https://www.cftc.gov/PressRoom/PressReleases/8326-20>

In 2006 the CFTC entered in to separate consent orders (orders) with defendants Christopher McDonald of Atlanta, Georgia, a former V.P. of West Trading at Mirant Americas Energy Marketing, L.P. and Michael Whalen, a former trader at Cinergy Corporation of Houston, Texas, settling charges that defendants falsely reported and attempted to manipulate natural gas prices. The orders arose from a CFTC lawsuit filed in 2005, charging that between January 2000 and late 2000 or early 2001, defendants repeatedly submitted, and directed others to submit, false natural gas trading information, including fabricated price, volume and counterparty information, to certain firms that compile natural gas price indexes.

See *U.S. Commodity Futures Trading Commission Launches Multiple Federal Actions Against A Total Of 15 Energy Traders, Charging Them With False Reporting And Attempted Manipulation* CFTC Press Release 5045, February 1, 2005, available at: <http://www.cftc.gov/opa/enf05/opa5045-05.htm>. The CFTC complaint charged that during the summer and fall of 2000, Whalen, in concert with McDonald and another Mirant trader named in the complaint, submitted false natural gas trading information to a natural gas price index. The complaint further charged that McDonald, Whalen and their co-defendant knowingly submitted, and worked actively in concert to submit, the false natural gas trade information to companies that calculated natural gas price indexes including *Inside FERC Gas Market Report*, *Gas Daily*, and *Natural Gas Intelligence*, in an attempt to skew that index at multiple natural gas delivery locations to benefit their trading positions. <https://www.cftc.gov/PressRoom/PressReleases/5258-06>.

or the courts or where needed information concerning a related underlying market is available to another relevant Market Authority);

- ii) the power to intervene or direct others to intervene in the market;
- iii) the power to take disciplinary action against members and non-members; and
- iv) the power to initiate or to refer appropriate matters for criminal prosecution.

Relevant Market Authorities should have rules and compliance programs in place to prevent or to deter abusive practices in their markets, including manipulation or attempted manipulation of the market. The rules and compliance programs should take into account the whole position of the market participant. Relevant Market Authorities should review their powers on a regular and ongoing basis and, if necessary, take appropriate steps to promote improvements or eliminate existing impediments in their legal and regulatory framework that may inhibit their ability to detect and enforce manipulation cases, such as the inability to access certain market information, the inability to enforce against attempted manipulation and the inability to investigate unregulated market participants, including individuals and entities.

Discussion

The harmful market effects of manipulation and the lack of effective means to address manipulative activity has been a longstanding concern of IOSCO,¹¹⁴ which has stressed that regulators must have effective tools to prevent and detect market manipulation, have adequate authority to investigate, deter and prosecute market manipulation, and the ability to cooperate at all stages of a matter. However, the Task Force has identified a number of issues that complicate the successful identification and prosecution of manipulation and other abusive conduct in commodity derivatives markets. These issues can include:

- inadequate legal framework (e.g., poor definitions of prohibited conduct and unrealistic standards of proof);
- inadequate powers to access information in related underlying markets;
- difficulty in identifying manipulative schemes involving multiple markets and participants;
- lack of ability to investigate non-regulated individuals and entities;
- inadequate resources; and
- outdated record-keeping requirements.

Where appropriate, relevant Market Authorities should review their existing statutory and administrative market abuse authority to address these identified issues and to determine whether it adequately allows for the prosecution of attempted manipulation. Parties involved in manipulation may not succeed with the scheme to influence the price of a derivatives

¹¹⁴ *Investigating and Prosecuting Market Manipulation*, Report of the Technical Committee of IOSCO, May 2000, available at: <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD103.pdf>.

Credible Deterrence in The Enforcement of Securities Regulation, June 2015, available at: <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD490.pdf>

contract or otherwise engage in manipulative activity as it may be difficult for regulators to prove perfected manipulation. Relevant Market Authorities should take affirmative steps to request the necessary powers to enforce against attempted manipulation.¹¹⁵

Attempts to manipulate commodity futures markets may often involve conduct in financial and underlying markets. The inability of relevant Market Authorities to access information with regard to certain markets is a material deficiency that should be addressed through legislative action. Relevant Market Authorities should cooperate with any other relevant authorities, domestically and internationally, to share supervisory information and to assist in possible investigations of abusive conduct.¹¹⁶

However, in some jurisdictions, relevant Market Authorities do not have the ability to investigate entities that are not licensed or otherwise regulated. This can dampen the ability to investigate and sanction manipulative or abusive conduct. Relevant Market Authorities should consider requesting further authority to investigate any market participant for potential manipulative or abusive conduct.

Relevant Market Authorities should ensure that they have sufficient resources for an enforcement program that targets manipulative and other abusive trading conduct, including complicated manipulative schemes involving multiple (i.e., financial and underlying physical) commodity markets. This ordinarily will require coordination by a relevant Market Authority that can exercise governmental powers to investigate and take enforcement action.¹¹⁷

Relevant Market Authorities may wish to consider whether enhancing record keeping requirements, such as telephone recording, instant messaging and extended record retention periods could be of benefit to the investigative and enforcement processes.

Powers over Market Members and Non-Market Members

Principle 20: Disciplinary Actions Against Market and Non-Market Members - *Relevant Market Authorities should have and use effective powers to discipline its members or other authorized market participants if an abusive practice has occurred in the market. There should be clarity as to the types of disciplinary actions which can be taken.*

Relevant Market Authorities should have power to take action against non-members of regulated commodity derivatives markets or other market participants if they have engaged in abusive or manipulative practices or are suspected of doing so. Relevant Market Authorities may require contractual relationships between members and customers that enable action to be taken.

In addition, relevant Market Authorities should be able to intervene, or cause the exchange to intervene, in the market to address or to prevent an abuse by non-members, using appropriate measures - through members - such as for example by raising the level of margin, imposing trading limits and liquidating positions, as well as removing trading privileges. Any intervention action should

¹¹⁵ See *Task Force on Commodity Futures Markets*, Final Report, IOSCO, March 2009, fn 6.

¹¹⁶ Ibid.

¹¹⁷ Ibid.

be timely.

Strong regulation that holds individuals and entities accountable and deters misconduct promotes public confidence in commodity markets and is a key factor in the development of fair, efficient and transparent markets. Wrongdoers should perceive that the risks of engaging in misconduct outweigh the rewards and non-compliant attitudes and behaviors should be discouraged through deterrent disciplinary sanctions.

Disciplinary actions should, amongst other things, include some or all of the following measures:

- i)* warnings (public and private);
- ii)* reprimands;
- iii)* re-training;
- iv)* remediation plans including, but not limit to, compliance audits
- v)* restitution;
- vi)* disgorgement of illicit gains;
- vii)* fines;
- viii)* conditions on trading;
- ix)* trading prohibitions;
- x)* suspension from membership;
- xi)* expulsion from membership; and
- xii)* where appropriate, a criminal referral.

Disciplinary Sanctions Against Non-Members of the Market

Markets may not have the authority and, therefore, lack the ability, to take disciplinary actions against non-members. This may be the case where members' customers trade directly under direct electronic access arrangements. This is because most markets' electronic systems do not identify the particular customers of market-members who may offer sponsored access or automated order routing¹¹⁸. The lack of a contractual arrangement between the market and such a market participant also complicates a relevant Market Authority's ability to sanction that participant directly.

Although market rules might make market members responsible for their customers' trading (e.g., "know your customer" rules), there may be legal impediments to prosecute a member for the violation of the market rules caused by its customer. Many markets require members to establish contractual relationships with their customers that include a specification of legal liability for violation of market rules. It should be left to individual jurisdictions to determine whether they should establish requirements governing the legal relationships between markets, intermediaries and their customers.¹¹⁹

¹¹⁸ See *Principles for Direct Electronic Access to Markets*, IOSCO August 2010, fn 69.

¹¹⁹ See *Ibid* Principle 2 "legally binding agreement".

Principle 21: Information Sharing – *Relevant Market Authorities should cooperate with one another, both domestically and outside the jurisdiction, to share information for surveillance and disciplinary purposes, including establishing arrangements that allow them to share information on large exposures in linked markets and on physical commodity supplies for these markets. These arrangements should take account of (as applicable):*

- i) *The Exchange International Information Sharing Memorandum of Understanding and Agreement (Exchange International MOU)¹²⁰ and the Declaration on Cooperation and Supervision of International Futures Exchanges and Clearing Organizations (Declaration),¹²¹ which facilitate the identification of large exposures by firms that could have a potentially adverse effect on multiple markets;*
- ii) *The IOSCO Multilateral Memorandum of Understanding Concerning Consultation and Cooperation and the Exchange of Information (MMOU); and*
- iii) *Guidance issued by IOSCO in respect of information sharing, such as IOSCO's Principles Regarding Cross-Border Supervisory Cooperation,¹²² Report on Multi-jurisdictional Information Sharing for Market Oversight,¹²³ and Guidance on Information Sharing.¹²⁴*

¹²⁰ The development of the *Exchange International MOU* was one of the achievements that resulted from the FIA sponsored Global Task Force on Financial Integrity, which was convened to address the cross-border issues that were identified in connection with the failure of Barings Plc.

¹²¹ The *Declaration* was developed through discussions at the CFTC's international regulators conference, and was motivated by work recommendations issued from the Windsor Conference and Tokyo Conference, which were convened by the CFTC, the U.K. FSA and Japanese regulators (Ministry of International Trade and Industry (MITI) and the Ministry of Agriculture, Forestry and Fisheries (MAFF)) to respond to the cross-border issues raised by the failure of Barings Plc. The *Declaration* was developed to address instances in which an exchange would not be able to share information directly with another exchange under the *Exchange International MOU*.

¹²² See *Principles Regarding Cross-Border Supervisory Cooperation*, Final Report of the Technical Committee of IOSCO, May 2010, available at: <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD322.pdf>.

¹²³ See p.11 *Multi-jurisdictional Information Sharing for Market Oversight*, Final Report of the Technical Committee of IOSCO, April 2007, available at: <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD248.pdf>. Among the information cited as possibly being useful is: transaction information e.g., details of trader's positions, large positions, and related underlying market positions and inventory levels and locations of delivery stocks and details of related warehouse information.

¹²⁴ *Guidance on Information Sharing* (IOSCO 1997) – Internal Document. The Guidance provides that in dealing with unusual price movements or market volatility, markets and regulators should be prepared to share the following information: i) firms/customers controlling or owning the largest long/short positions in relevant securities or derivatives; ii) concentration and composition of positions in the relevant securities or derivatives, including Firm positions or Customer positions, both on organized markets and in the OTC markets; and (iii) characteristics of related instruments, such as terms of the underlying physical market instrument or physical commodity, procedures for delivery or cash settlement, and deliverable supply of the relevant physical market instrument or physical commodity.

See also *Principles of Memoranda of Understanding*, Report of the Technical Committee of IOSCO, September 1991, available at: <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD17.pdf>

Mechanisms to Enhance Open and Timely Communication Between Market Authorities of Related Cash and Derivative Markets During Periods of Market Disruption, Report of the Technical Committee of

Information sharing to facilitate heightened surveillance is warranted where physical commodity derivatives contracts trade on different exchanges and are linked economically, such as where one contract's settlement price is determined by reference to the settlement price of the other contract.

When exchange member firms and market participants trade on multiple markets, no one regulator or relevant Market Authority will have all of the information necessary to evaluate the risks to its markets. Accordingly, relevant Market Authorities must be prepared and legally empowered to share such information with their regulatory counterparts, both domestic and foreign, in a timely manner.

Relevant Market Authorities should keep confidential requests for information and details of information exchanged. Relevant Market Authorities should use no less care in handling information received from another regulator than they would employ to protect the confidentiality of equivalent domestic information. The passing of non-public information by a requesting relevant Market Authority to another relevant Market Authority may be conditioned on the requested authority being satisfied as to the obligation of the requesting authority to maintain an equivalent level of confidentiality and meet other regulatory requirements.

Information shared between relevant Market Authorities should be used solely for carrying out the responsibilities of the requesting relevant Market Authority, which includes enforcement. A request for information should indicate precisely the reason for the request. Such information should not be used contrary to conditions relating to the use of that information stipulated by the requested relevant Market Authority to give effect to laws, rules or regulations in force in the requested authority's jurisdiction.

Relevant Market Authorities may need to request changes to legislation and/or rules so that they have the mandate to share information with their regulatory counterparts as outlined.

Discussion

Cooperation is vital to ensuring that investigations and enforcement actions are not impeded unnecessarily by jurisdictional boundaries, both domestic and foreign. The IOSCO Objectives and Principles of Securities Regulation and related Assessment Methodology should be consulted to understand the specific powers that regulators should have for cooperation purposes and the specific expectations that result from those Principles on Cooperation.¹²⁵ While regulators have different supervisory approaches, each has a common interest in information-sharing and cooperation based on earned trust in each other's regulatory and

IOSCO, October 1993, available at: <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD29.pdf>.

Report on Cooperation Between Market Authorities and Default Procedures, Report of the Technical Committee of IOSCO, March 1996 available at: <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD49.pdf>.

¹²⁵ IOSCO Principle 13 measures the extent of a regulator's ability to share information. Principle 14 deals with whether the regulator has mechanisms in place to establish when and how the regulator will share information with its counterparts. Principle 15 relates to the types of assistance that a regulator may provide to a counterpart. The IOSCO Multilateral memorandum of Understanding is designed to facilitate, among other things, the implementation of Principles 13, 14 and 15.

supervisory systems.¹²⁶

Joint investigations can be complex because they involve regulators from multiple jurisdictions with differing laws and investigative approaches. Where more than one regulator, either within a particular jurisdiction or in different jurisdictions, investigates or acts on the same or a closely related set of market facts, all authorities should seek to co-operate consistent with the IOSCO Principles on Cooperation and other Technical Committee guidance.¹²⁷

The form and content of the cooperation will vary from case to case.¹²⁸ It is essential that assistance can be provided not only for use in investigations but also for other types of inquiries, for example as part of a compliance program for the purpose of preventing illicit activities within the scope of commodity derivatives markets regulation or to assist in sharing enforcement techniques between regulators.

Information sharing also is critical to support a relevant Market Authority's market surveillance responsibility. In this regard, the IOSCO Technical Committee published a report *Guidance on Information Sharing*, which identifies information that may be relevant from a market surveillance perspective in addressing specific types of market events. The type of information that potentially may be relevant for market oversight purposes was further developed in the Technical Committee's report on *Multi-jurisdictional Information Sharing for Market Oversight* published in April 2007.

In addition to outlining the types of information that may be useful to share when addressing cross-border surveillance concerns, the *Multi-jurisdictional Information Sharing for Market Oversight* report makes clear that parallel trading of derivatives may present opportunities for market participants to engage in conduct that is illegal in one or both jurisdictions. Depending on the links between specific commodity markets, this is an area in which the development of formal information sharing arrangements is appropriate.¹²⁹

Relevant Market Authorities should be prepared to share the following types of information with other relevant Market Authorities on a routine basis, as requested:

- i) terms and conditions of each commodity derivatives contract, including details of market regulations such as position limits and price limits;
- ii) details of delivery rules and procedures;
- iii) general details about the range of market information collected and analyzed;
- iv) details of designated warehouses, delivery points, shipping locations and crypto wallets where crypto derivatives are involved; and

¹²⁶ See *Principles Regarding Cross-Border Supervisory Cooperation*, IOSCO, May 2010, fn 98.

¹²⁷ See in particular the Technical Committee's Report "*Joint Cross-Border Investigations and Related Proceedings*", Internal Report of the Technical Committee of IOSCO, February 2009. This report provides guidance with respect to some of the issues that regulators should anticipate when contemplating a joint investigation.

¹²⁸ See *Multijurisdictional information sharing and market oversight*, IOSCO, April 2007, fn 99.

¹²⁹ For example, in 2006 the CFTC and UK FSA signed an MOU to address cross-border market surveillance concerns with regard to the trading of linked oil contracts on futures exchanges in both jurisdictions. That matter involved futures contracts on ICE Futures Europe that settled off of the price of contracts traded on NYMEX. Available at:
<https://www.cftc.gov/sites/default/files/idc/groups/public/@internationalaffairs/documents/file/ukfsa06.pdf>

- v) important contact names in each market.

When a specific concern exists about a potential abuse affecting a market, information-sharing arrangements between relevant Market Authorities should allow relevant Market Authorities to provide the following additional information, as appropriate, to relevant Market Authorities in related markets, whether domestic or outside the jurisdiction, promptly and comprehensively:

- i) details of members' positions, in particular details of large positions held by members of and participants in the market, including on-exchange, related OTC derivatives and physical market positions;
- ii) inventory levels and locations of delivery stocks;
- iii) delivery mode and forms of service¹³⁰
- iv) action taken to implement position management powers;
- v) changes to position limits;
- vi) additional margin calls; and
- vii) other action taken by any relevant Market Authority.

Finally, relevant Market Authorities should recognize the burdens and costs imposed on the requested entity. Information sharing requests can result in information overload and unnecessary burdens, for both the requesting and requested entity, if not carefully calibrated. In this regard, the IOSCO previously has stated:

“For information to be useful to the requester, it needs to be relevant, to arrive in useable form and to be obtainable on a timescale appropriate to the need. All information requests are resource-consuming for a requested authority, some of whom may have limited resources. So, it is important that authorities likely to require information give thought to the focus, clarity and prioritization of their information requests. They should also be mindful of the types of public information that they can readily obtain from themselves, in particular via websites.”¹³¹

¹³⁰ It might be beneficial for relevant Market Authorities to have access to information on the specific mode of delivery and forms of service in addition to inventory information of the specific commodity. For example, what form of delivery was held (IT, firm, exchange), whether or not there were multiple inventory transfers being transferred (i.e., etags in the spot physical market) or if a market participant held a substantial amount of capacity and was not using it to the detriment of other physical market participants who then cannot get their product to market.

¹³¹ See p.7 *Multi-jurisdictional Information Sharing for Market Oversight*, IOSCO, April 2007, fn 99.

Chapter 8 Principles on Technological Developments in Commodity Derivatives Markets

A. Introduction

While the Principles reflected the characteristics of commodity derivatives markets at the time that they were produced, these markets have continued to evolve over the past decade. These recent developments merited further analysis to ensure that the Principles continue to provide a resilient framework for the regulation and oversight of the commodity derivatives markets. This section aims to address some of the important technological developments since the publication of the Principles in 2011. These developments include the increasing use of high frequency trading and the role of algorithmic trading models and direct electronic access by end-users bypassing intermediaries.

B. Principles on Technological Developments in Commodity Derivatives Markets

Principle 22: Direct Access - *Where direct access to commodity derivative markets is offered or permitted, relevant Market Authorities should ensure that a clear framework, including appropriate policies and controls, is in place to facilitate such direct access by market participants, including non-financial firms.*

Direct Electronic Access (DEA) refers to automated order routing systems, sponsored access, and direct access by non-registrant/non-intermediary market members to markets. Securities and derivatives exchanges are predominantly electronic, which has facilitated their operations globally through various forms of communication. Spurred by the increasing demand by customers for access to global markets, the means to access markets has evolved through continual innovation. Increased access helps promote market efficiency, competition and participation. The ability to transmit orders directly to a market in real time gives DEA users greater control over their trading decisions, lowers transaction costs, and reduces latency of

While it brings various benefits, DEA has also introduced several regulatory challenges and risks to markets, intermediaries and their regulators.

- To what extent a user may access markets outside of the infrastructure and/or control of market intermediaries, which challenges intermediaries' traditional risk management approaches and may make rule compliance and monitoring more difficult, particularly with regard to market manipulation and insider dealing;
- The creation of incentives for intermediaries/customers to gain execution advantages based on the type and geographic location of their connectivity arrangements, which raises potential fairness concerns; and
- Facilitating algorithmic trading through automated systems, which raises issues of capacity and the potential need for rationing bandwidth. Indeed, some algorithmic trading systems are capable of transmitting several thousand order messages to a market in less than a second.

Discussion

With a view to increase and attract more participation from the non-financial sector, there is a need to allow direct electronic access to commodity derivatives markets by firms in the non-financial sector. Such firms can benefit by direct access for hedging, lower transaction costs, and enhanced confidentiality. Other intended benefits which may accrue to non-financial firms include: (i) better control over margin deposits, collateral and mark-to-market; (ii) less risk and impact of broker defaults; (iii) faster order execution; and (iv) better use of hedging opportunities. Further, with increased participation and hedging by such firms on venue, risks can be transferred to entities that can better absorb them, thereby reducing the risk to the real economy.

Against the potential risks that may stem from DEA, the market or the market intermediary should not offer DEA unless adequate pre-trade information is provided, and both regulatory and financial controls. Regulators should retain the power to allow or prohibit any form of DEA as well as to establish requirements in the DEA area, including pre-trade controls and risk limits, and should also exercise regulatory oversight over the decisions made by clients, intermediaries, and exchanges.¹³²

Principle 23: Role of High Frequency Trading and Algorithmic Trading in Commodity Derivatives Markets – *Relevant Market Authorities and regulated trading venues should have in place a clear framework of policies and controls to analyse the impact of high frequency and algorithmic trading in commodity derivative markets.*

Algorithms have been used in trading for many years, but their breadth, variety and complexity has continuously evolved. The use of technology in such a way has fostered changes in the profile of market participants. Most obviously, high frequency traders have emerged, who use algorithms intensively. Their activities have given rise to considerable interest regarding their impact on market efficiency and integrity.

Some strategies employed by high frequency traders may provide liquidity to the markets in which they operate and, by using algorithms to identify and exploit price discrepancies between markets, improve the consistency of an instrument's pricing across venues. That being said, the very short term nature of many HFT strategies, coupled with high speed, high volume trading algorithms, might move the market prices away from fundamental values in the short term and impair the price discovery process that takes place on public and transparent markets.

There is also concern among some market participants that the presence of high frequency traders may discourage other market participants, as they may feel at an inherent disadvantage to these traders' superior technology. Another concern is that the growing involvement of automated quantitative trading strategies may also contribute to the transmission of shocks across trading venues trading the same product or across markets trading different assets or asset classes. The extent of the impact depends on how individual algorithms are programmed and how they respond to changes in market conditions. For instance, interconnections between markets, which may be amplified by algorithms programmed to operate on a cross-market basis, may allow for a shock to pass rapidly from one market to another, potentially increasing the speed at which a systemic crisis could develop. This was illustrated by the Flash Crash

¹³² <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD332.pdf>

event of May 2010.¹³³

Discussion

The derivative markets are significantly different today from those of the late 90s and the market structure has changed considerably over the last decade owing to increase in automation, globalization, dispersion of trading venues etc. The most significant change in the commodity derivatives markets all over the world is that they have become increasingly international and electronic. Internationalization along with modernization and technological advancements in financial sector industry and in commodity derivatives markets have led to investors and traders looking beyond the borders for business and investment opportunities.

Algorithmic trading, like all electronic trading, results in the need for changes to the way regulators monitor trading. Increased algorithmic trading has increased the complexity of surveillance for competent authorities. Having sophisticated systems or algorithms that monitor trading and detect patterns is a necessity in this environment of high speed and complex trading in order to maintain market integrity and confidence.

While relevant Market Authorities recognize the benefits associated with advancements in technology, the use and impact of automated and HFT certainly pose challenges and necessitate monitoring in order to identify and address risks for markets' efficiency and integrity.

Execution of the orders has increasingly becoming about speed and finding good counterparty orders. To take advantage of such opportunities or events occurring in other countries, financial firms are increasingly using HFT by capitalizing on latency arbitrage. The use of HFT has seen an increasing trend in the commodity derivatives markets and this could help the non-financial firm to execute their orders at varied times and price levels due to lower bid-ask spread and liquidity. However, due to divergent views on the efficacy of the use of HFT or algorithmic trading, it is prudent that its impact on the price discovery process, physical markets and non-financial firms may be analyzed on regular intervals so that market participants do not lose faith and confidence in the fairness of the markets.

IOSCO in the consultation paper on "Regulatory Issues Raised by the Impact of Technological Changes on Market Integrity and Efficiency" published in July 2011 has stated the following regarding HFT: "Defining HFT is difficult and there is no single agreed definition. Determining a precise definition may not even be practical for regulatory purposes as it could easily become obsolete or the object of regulatory arbitrage, as HFT may be used in different ways across various markets and asset classes. An additional complexity in seeking to define HFT is that it encompasses many players, different organizational and legal arrangements and, most importantly, a wide number of diverse strategies.

A number of common features and trading characteristics related to HFT can be identified:

- It involves the use of sophisticated technological tools for pursuing a number of different strategies, ranging from market making to arbitrage;

¹³³ Nevertheless, it is important to remember that the events of May 6,2010 occurred within a specific market structure. The US markets have a strong degree of inter-linkage. Due to this interconnectedness shocks in one market are likely to quickly pass on to other markets. Other market regions do not show the same degree of interconnectedness.

- It is a highly quantitative tool that employs algorithms along the whole investment chain: analysis of market data, deployment of appropriate trading strategies, minimization of trading costs and execution of trades;
- It is characterized by a high daily portfolio turnover and order to trade ratio (i.e., a large number of orders are cancelled in comparison to trades executed);
- It usually involves flat or near flat positions at the end of the trading day, meaning that little or no risk is carried overnight, with obvious savings on the cost of capital associated with margined positions. Positions are often held for as little as seconds or even fractions of a second;
- It is mostly employed by proprietary trading firms or desks; and
- It is latency sensitive. The implementation and execution of successful HFT strategies depend crucially on the ability to be faster than competitors and to take advantage of services such as direct electronic access and co-location.

Though there are divergent views on efficacy of HFT on one hand it is believed that HFT has led to improved liquidity, lower bid-ask spreads, quicker price discovery, reduced market volatility. While on other hand, their impact on the integrity, fairness and efficiency of the market is questionable or doubtful. With the trades being executed in milliseconds, it can create artificial highs and lows in the market, odds of a sudden liquidity drain and can potentially take the prices of the commodity derivatives far away from their fair price. The retail investor may lose faith and confidence in the fairness of the markets if it is perceived that there are super computers putting orders in the system that will in most probability make money on those trades.

Chapter 9 Principle on Promotion of Investor Education and Awareness

A. Introduction

The historical performance of commodity derivatives proves the attractiveness of commodity derivatives as an asset class, as well as their benefits to diversify traditional bond and stock portfolios. The use of commodity derivatives as an asset class, a phenomenon called *financialization*, resulted in an increased correlation between commodities and other financial assets; and increased notional amounts of commodity derivatives. As a consequence, there has been an exponential increase in trading of commodity derivatives both in organized exchanges and OTC markets since the last decade, which in turn created various retail investor protection issues and the need to increase investor awareness on potential consequences of investing in commodity derivatives.

B. Principle on Promotion of Investor Education and Awareness

Principle 24: Promotion of Investor Education in Commodity Derivatives Markets - *Relevant Market Authorities should put in place an appropriate mechanism for promoting investor education amongst market participants and the general public about the potential benefits of the commodity derivatives markets. Relevant Market Authorities should also inform the public and retail investors, about the unique risks associated with investing in commodity derivatives, particularly during times of market stress and extreme volatility.*

The rise of the commodity derivatives as an asset class can be explained with a couple of changes in the financial markets, such as the recent technological developments (the use of high frequency and algo-trading increasing the scale, speed and cross-border nature of trading on commodity derivatives markets); an increase in the variety of instruments (such as ETPs and index funds) as a result of financial innovation, resulting in decreased transaction costs and increased reach particularly for retail investors; and investors being in the search of higher returns in the recent low interest rate environment, and thus, looking for new asset class types.

However, unlike a share of a company, commodity derivatives such as commodity futures have settling mechanisms that may be foreign to many securities investors. For example, while many ETPs are branded as instruments that track the movement of the underlying commodity, the reality is that contango or backwardation of the forward curve may erode the investor's profit when the ETP rebalances its portfolio from nearer term contracts to further term contracts.

Discussion

IOSCO members have observed an exponential increase in the share of retail investment flow into commodity futures, with increasing levels of leverage via financial innovation. Excessive risk-taking by retail speculators wishing to make a quick profit, while not new, has appeared to increase substantially. This environment has been compounded by challenges presented by rapidly changing information (and misinformation) during the COVID-19 crisis.

Targeted investor education and awareness initiatives can help ensure that retail speculators and investors understand the nature of their trades, for example, the difference between

investing in an oil ETP and trading oil futures or purchasing stock in an oil company. For example, the unprecedented volatility in the crude oil markets during the March-April 2020 period due to COVID-19, significantly increased the potential risks associated with trading crude oil futures-backed ETPs. Many retail investors experienced losses by going long in oil markets and their related derivative products. The US CFTC issued a Customer Advisory informing the public about the unique risks associated with trading in commodity ETPs and funds.¹³⁴

¹³⁴ See CFTC COVID-19 Customer Advisory on Commodity ETPs and Funds; available at: https://www.cftc.gov/LearnAndProtect/AdvisoriesAndArticles/CustomerAdvisory_CommodityETPs.htm

Chapter 10 - Conclusion

Relevant Market Authorities play a critical role in responding effectively to disorderly market conditions and ensuring that physical commodity markets operate free from manipulation and abusive trading. The Principles set out in this Report will assist relevant Market Authorities in constructing an appropriate regulatory and supervisory approach that meets these objectives. Accordingly, relevant Market Authorities should review their policies and laws to ensure that the Principles are put into effect through active surveillance and enforcement measures.

The occurrence of multi-market trading abuses which have involved illicit trading across commodity futures, OTC derivatives and physical commodity markets, requires that there be a relevant Market Authority charged with the responsibility to actively conduct surveillance and enforcement to detect and prosecute such abusive schemes. Although no relevant Market Authority can prevent every market abuse, credible efforts are necessary, including credible deterrent regimes.¹³⁵ These Principles will be of little effect in the absence of a commitment to implementing a robust and active surveillance and enforcement structure. However, the focus of such a structure cannot be one dimensional and focused solely on an individual exchange, although such surveillance remains essential.

This Report makes clear that understanding prices in the physical commodity markets is an important element for understanding price formation in the commodity derivatives markets. This is an area that deserves continued analysis by appropriate organizations with a focus on physical commodity markets.

This report also emphasizes the key importance of transparency as a means to improve market functioning and understanding. After all, better information flow is essential to promote efficient marketplaces. This is true not only for information about commodity derivatives, but also for information about the underlying markets, both data on market fundamentals and data on physical trades. The improvements in transparency are intended to improve stakeholder confidence and visibility to regulators. If a market were to have better information on which to base its decisions, the dividend would be a substantial improvement in market functioning.

In light of the changes in the commodity derivatives markets since the publication of the original Principles in 2011, IOSCO has identified the developments that warrant a review of the original Principles. These recent developments, trends and events justified an update and revision of the Principles, with a particular focus on market surveillance; transparency; price discovery; correlation with physical markets; addressing disorderly markets; responding to market abuse; and enforcement powers of trading venues against end-user behaviors.

To this end, the revised Principles reflect the impact of some of the recent developments in financial technologies in commodity derivatives space, as well as the increasing number of unexpected disruptions that affected commodity derivatives trading. Additionally, the revised Principles aim to address certain market transparency issues that stem from the increasing role of data and data providers in commodity derivatives markets.

Finally, the revised Principles call on relevant Market Authorities to address investor education

¹³⁵ Credible Deterrence In The Enforcement Of Securities Regulation, <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD490.pdf>

matters and awareness particularly related to certain risks to retail investor inherent in commodity derivatives trading. As the COVID-19 experience has showcased, retail investors, without interest in underlying physical commodities, can become more active players in certain commodity futures and ETF markets, which they might not be familiar with. Under extreme volatility conditions, they may end up losing their investments.

While the IOSCO implementation reviews in 2012, 2014 and 2018 demonstrate a high level of implementation, relevant Market Authorities need to improve further their implementation level to reflect and address the recent changes and trends in commodity derivatives markets as set forth in the revised Principles. Relevant Market Authorities should put policies in place to help the marketplace to cope with these developments.

IOSCO reiterates the importance of the Principles as an overarching framework in regulation and supervisions of commodity derivatives markets. The Principles would therefore help emerging markets in designing their regulatory framework and market infrastructure.

Appendix A - Summary of the Principles (without footnote citations)

Principles for the Design and Review of Physical Commodity Derivatives Contracts

Principle 1: Accountability – Relevant Market Authorities should establish a clear framework of criteria or procedures as to design and review of commodity derivatives contracts, ensuring that the relevant Market Authority retains powers to address or vary the provisions of contracts, which produce manipulative or disorderly conditions, or systemic risk. Relevant Market Authorities should be accountable for compliance with statutory and/or self-regulatory standards on a continuous basis.

Principle 2: Economic Utility – Relevant Market Authorities should ensure that contracts are designed to meet the risk management needs of potential users and promote price discovery of the underlying commodity. Relevant Market Authorities should be informed of contract characteristics and should review and/or approve the contract. Relevant Market Authorities should ensure that the views of participants in the commodity derivatives markets are taken into account in designing commodity derivatives contract.

Principle 3: Correlation with Physical Market - While designing and/or reviewing the commodity derivatives contracts, relevant Market Authorities should ensure that contract terms and conditions should, to the extent possible, reflect the operation of the underlying physical market and avoid impediments to physical delivery of commodities. Relevant Market Authorities should review the contracts under their jurisdiction on a periodic basis for appropriate correlation with the physical market to ensure that the contractual terms and conditions conform to the prevailing physical market practices.

Principle 4: Promotion of Price Convergence through Settlement Reliability – Relevant Market Authorities should ensure that settlement and delivery procedures outlined in the contract design reflect the underlying physical market and promote reliable pricing relationships and price convergence and are regularly evaluated to ensure that they meet this standard. Settlement and delivery terms should be specified and made available to market participants.

Principle 5: Transparency on Contractual Terms and Conditions - Information concerning a physical commodity derivatives contract's terms and conditions, as well as other relevant information concerning delivery and pricing, should be readily available to the relevant Market Authorities with respect to all derivatives transactions within its jurisdiction and to market participants in organized derivatives markets.

Without limiting the factors that a relevant Market Authority includes in those terms and conditions, market rules should specify, for example:

- i. Minimum price fluctuations (price ticks);
- ii. Maximum price fluctuations (daily price limits), if any;
- iii. Last trading day;
- iv. Settlement and delivery procedures;

- v. Trading months;
- vi. Position limits, if any;
- vii. Reportable levels;
- viii. Trading hours; and
- ix. Custody arrangements.

Principles on Data and Market Transparency

Principle 6: Role of Price Reporting Agencies in Price Assessments - Relevant Market Authorities should consider whether the third-party price or index provider that performs a price assessment function, including a Price Reporting Agency (PRA), considers the Principles for Oil Price Reporting Agencies (PRA Principles).

Principle 7: Increased Role of Data and Information – Relevant Market Authorities should consider establishing a “Code of Conduct” for entities who are either independently or jointly involved in collection, dissemination/publication of data and information relating to the underlying commodity and which plays an important role in the price discovery process and timely hedging decisions by non-financial firms.

Principle 8: Public Disclosure - Relevant Market Authorities should publish the aggregate exposures of different classes of large traders, especially commercial and non-commercial market participants, within the bounds of maintaining anonymity of individual market participants.

Principle 9: OTC Transparency - All IOSCO Members should promote the reporting of OTC derivatives contracts to trade repositories in order to improve transparency, mitigate systemic risk, and protect against market abuse in commodity derivatives markets. The relevant governmental regulator of commodity derivatives markets should work with regulators responsible for trade repositories to:

- i) evaluate what improvements are appropriate to enhance the usefulness of, and access by regulators to and disclosure to the public of, OTC commodity derivatives markets data that is reported to trade repositories; and
- ii) take affirmative steps such as encouraging ongoing work by the industry, rulemaking or recommending legislative changes to achieve these objectives.

Principles for the Surveillance of Commodity Derivatives Markets

Principle 10: Framework for Undertaking Market Surveillance – Relevant Market Authorities should have a clear and robust framework for conducting market surveillance, compliance and enforcement activities and there should be oversight of these activities. A market surveillance program should take account of a trader’s related derivatives and physical market positions and transactions, including the impact of ETPs, where relevant. Market surveillance programs should be supported by sufficient resources, access to physical market data and analytical capabilities.

Principle 11: Monitoring, Collecting and Analyzing Information – Relevant Market Authorities should develop, employ and maintain methods for monitoring of trading activity on the markets they supervise, collecting needed information and analyzing the information they collect that are efficient and suitable for the type of market being supervised. Effective monitoring of orders and electronic transactions requires real-time monitoring capabilities, supported by automated systems that detect trading anomalies. Monitoring, collection and analysis should also focus on intra-day trading.

Principle 12: Authority to Obtain Information – Relevant Market Authorities should have the authority to obtain information on a routine and non-routine basis for regulated commodity derivatives markets as well as the power to obtain information on a market participant's positions in related over-the-counter (OTC) commodity derivatives and the underlying physical commodity markets. In particular, relevant Market Authorities should have the power to:

- i) obtain information that allows the reconstruction of all transactions on a regulated commodity derivatives market (audit trail);
- ii) obtain information that permits them to identify large positions (i.e., “large exposures” or “concentrations”) and the composition of the market in question;
- iii) obtain information, if needed, on the size and beneficial ownership of positions held by a market participant in order to aggregate positions held under common ownership and control;
- iv) obtain information about a market participant's transactions and positions in related OTC and physical commodity markets; and
- v) take appropriate action where a commodity derivatives market participant does not make requested market information available to the relevant Market Authority.

Relevant Market Authorities should review the scope of their authority to obtain such information, and if necessary, to request such power from the relevant legislature or other appropriate governmental bodies.

Principle 13: Collection of Transaction Information on Commodity Derivatives Transactions and Positions for Market Surveillance – In respect of commodity derivatives transactions and positions, a relevant Market Authority should consider what information it should collect on a routine basis and what it should collect on an “as needed” basis. A relevant Market Authority that has access to a relevant Trade Repository's (TR) data should take such broader access into account, as well as its statutory obligations with respect to the TR, in constructing its data collection policies.

Information could include, as appropriate:

For information collected on a routine basis:

- i) transactional information including time and date of transaction, contract terms, counterparties to the contract and price of contract; and

- ii) *position information.*

For information collected on an “as needed” basis:

- i) *delivery intentions;*
- ii) *beneficial owners;*
- iii) *positions under common control; and*
- iv) *for contracts other than forwards, additional information may also need to be sought on notional values, replacement cost, valuation methodology or duration of the contracts.*

Principle 14: Large Positions – *Relevant Market Authorities should require the reporting of large trader positions for the relevant on-exchange commodity derivatives contracts. Relevant Market Authorities should have the ability to aggregate positions owned by, or beneficially controlled on behalf of, a common owner.*

Principles to Address Disorderly Commodity Derivatives Markets

Principle 15: Intervention Powers in the Market – *Relevant Market Authorities should have, and use, effective powers to intervene in commodity derivatives markets to prevent or address disorderly markets and to ensure the efficiency of the markets. These powers should include the following:*

1) Position Management Powers, Including the Power to Set Position Limits – *Relevant Market Authorities should have and use formal position management powers, including the power to set ex-ante position limits, particularly in the delivery month.*

These should necessarily include position management powers that:

i) *Establish a trader’s automatic consent to follow an order of the relevant Market Authority when that trader’s position reaches a defined threshold size or any size, which the relevant Market Authority considers prejudicial to orderly market functioning, taking into account all relevant circumstances. They should also require such a trader to comply with the relevant Market Authority’s order, either not to increase a position or to decrease a position; and*

ii) *Authorize a relevant Market Authority to place ex-ante restrictions on the size of a position a market participant can take in a commodity derivatives contract (i.e., position limits).*

2) Other Discretionary Powers – *Relevant Market Authorities should also have the powers to employ any of the following measures, as appropriate to address market disruption or the perceived threat of such disruption or to assist market surveillance efforts:*

- i) *the imposition of price movement limits;*
- ii) *calling for additional margin, either from customers or from clearing members on behalf of their clients;*

- iii) *ordering the liquidation or transfer of open positions;*
- iv) *suspending or curtailing trading on the market (e.g., trading halts and circuit breakers);*
- v) *altering the delivery terms or conditions;*
- vi) *cancelling trades;*
- vii) *requiring owners of positions to specify delivery intentions; and*
- viii) *requiring traders to disclose related OTC derivatives or large physical market positions.*

Principle 16: Unexpected Disruptions in the Market – *Relevant Market Authorities should have a process to respond to unexpected disruptions in commodity derivatives markets and the power to intervene, as necessary, to restore orderly markets in the event of an unexpected disruption and ensure market participants have a process and adequate plans to address unexpected disruptions.*

Principle 17: Review of Evolving Practices – *Relevant Market Authorities should have, or contribute to, a process to review the perimeter of regulation to ensure that they have the power to address evolving trading practices that might result in a disorderly market. Exchanges and self-regulatory organizations play a critical and complementary role with governmental regulators in identifying such practices.*

Principles for Enforcement and Information Sharing

Principle 18: Rules and Compliance Programs – *Relevant Market Authorities should have rules, compliance programs, sanctioning policies and powers to prohibit, detect, prevent and deter abusive practices on their markets, including manipulation or attempted manipulation of the market. The rules and compliance programs should take account of the whole position of the market participant (i.e., all positions under common ownership and control). There should be clarity as to what constitutes manipulative, abusive conduct or other prohibited conduct.*

Specific practices which relevant Market Authorities should seek to detect and prevent include, among others:

- i) *causing, or attempting to cause, artificial pricing in the market;*
- ii) *creating a false or misleading appearance of active trading;*
- iii) *disseminating false or misleading information in respect of the market or conditions that affect the price of any commodity;*
- iv) *creating, or attempting to create, a corner or squeeze, in which an abusive controlling position is accumulated in the physical and/or futures or OTC markets, forcing those holding short positions to settle their obligations, by purchase or offset or otherwise, to their detriment;*
- v) *abuse relating to customer orders;*

- vi) "wash trades", involving no change of beneficial ownership or economic purpose;
- vii) collusive trades, which seek improperly to avoid exposure to the pricing mechanism of the market;
- viii) violation of applicable position limits;
- ix) concealment of a position holder's identity; and
- x) misuse of information.

Principle 19: Framework for Addressing Multi-Market Abusive Trading and Powers and Capacity to Respond to Market Abuse – Relevant Market Authorities should ensure that the regulatory framework for market surveillance and enforcement within a jurisdiction is structured to provide for active and coordinated detection and enforcement action against manipulative or abusive schemes that might affect trading on multiple trading venues and OTC markets, as well as the underlying physical commodity markets.

Relevant Market Authorities should have adequate powers and capacity to investigate and prosecute actual or suspected market abuse, including attempted manipulation.

Principle 20: Disciplinary Actions Against Market and Non-Market Members – Relevant Market Authorities should have and use effective powers to discipline its members or other authorized market participants if an abusive practice has occurred in the market. There should be clarity as to the types of disciplinary actions which can be taken.

Relevant Market Authorities should have power to take action against non-members of regulated commodity derivatives markets or other market participants if they have engaged in abusive or manipulative practices or are suspected of doing so. Relevant Market Authorities may require contractual relationships between members and customers that enable action to be taken.

In addition, relevant Market Authorities should be able to intervene, or cause the exchange to intervene, in the market to address or to prevent an abuse by non-members, using appropriate measures - through members - such as for example by raising the level of margin, imposing trading limits and liquidating positions, as well as removing trading privileges. Any intervention action should be timely.

Principle 21: Information Sharing – Relevant Market Authorities should cooperate with one another, both domestically and outside the jurisdiction, to share information for surveillance and disciplinary purposes, including establishing arrangements that allow them to share information on large exposures in linked markets and on physical commodity supplies for these markets. These arrangements should take account of (as applicable):

- i) *The Exchange International Information Sharing Memorandum of Understanding and Agreement (Exchange International MOU) and the Declaration on Cooperation and Supervision of International Futures Exchanges and Clearing Organizations (Declaration), which facilitate the identification of large exposures by firms that could have a potentially adverse effect on multiple markets;*
- ii) *The IOSCO Multilateral Memorandum of Understanding Concerning Consultation and Cooperation and the Exchange of Information (MMOU); and*

- iii) *Guidance issued by IOSCO in respect of information sharing, such as IOSCO's Principles Regarding Cross-Border Supervisory Cooperation, Report on Multi-jurisdictional Information Sharing for Market Oversight, and Guidance on Information Sharing.*

Information sharing to facilitate heightened surveillance is warranted where physical commodity derivatives contracts trade on different exchanges and are linked economically, such as where one contract's settlement price is determined by reference to the settlement price of the other contract.

Principles on Technological Developments in Commodity Derivatives Markets

Principle 22: Direct Access –Where direct access to commodity derivative markets is offered or permitted, relevant Market Authorities should ensure that a clear framework, including appropriate policies and controls, is in place to facilitate such direct access by market participants, including non-financial firms.

Principle 23: Role of High Frequency Trading and Algorithmic Trading in Commodity Derivatives Markets – Relevant Market Authorities and regulated trading venues should have in place a clear framework of policies and controls to analyze the impact of high frequency and algorithmic trading in commodity derivative markets.

Principle on Promotion of Investor Education and Awareness

Principle 24: Promotion of Investor Education in Commodity Derivatives Markets – Relevant Market Authorities should put in place an appropriate mechanism for promoting investor education amongst market participants and the general public about the potential benefits of the commodity derivatives markets. Relevant Market Authorities should also inform the public and retail investors, about the unique risks associated with investing in commodity derivatives, particularly during times of market stress and extreme volatility.

Appendix B - Glossary of Terms

Many of the terms contained in this Glossary are either defined by an IOSCO member's regulation or are accepted terminology that has unique meanings, which have developed in a particular jurisdiction's markets. Therefore, the definitions that follow are intended to be generally descriptive, providing clarity to the interpretation of this document, but are not intended to be legally authoritative for any jurisdiction or market.

Banging the close – A manipulative or disruptive trading practice whereby a trader buys or sells a large number of futures contracts during the closing period of a futures contract (i.e., the period during which the futures settlement price is determined) in order to benefit an even larger position in an option, swap, or other derivative that is cash settled based on the futures settlement price on that day.

Collective Investment Scheme (CIS) – A CIS is an open ended collective investment scheme that issues redeemable units and invests primarily in transferable securities or money market instruments.

Commercial participant – A person who is hedging an underlying physical interest.

Corner – A situation where the rights to receive delivery on expiration of future contracts held by one or a group of participants acting in concert constitutes a substantial proportion of the quantity of underlying commodities eligible for delivery against the contract. This activity can also be referred to using other terms such as “squeeze.”

Crypto wallets – A crypto wallet is a device, physical medium, program or a service which stores the public and/or private keys required to send and receive crypto assets and execute transactions on the blockchain.

Direct Electronic Access – DEA generally refers to: (a) Customers being given direct access to the market through a registered intermediary's system/infrastructure, i.e., automated “order routing;” or (b) Customers of an intermediary being given direct access to the market without going through the intermediary's system/infrastructure, i.e., “sponsored” access.

Exchange Traded-Funds (ETFs) – A type of security that holds multiple underlying assets such as index, sector, investment strategy, bond, commodity or other assets which can be sold on a stock exchange.

Exchange-traded commodity contract – A contract to make or take delivery of a specified quantity and quality, grade or size of a commodity during a designated future month at a price agreed upon when the contract is entered into on an organized exchange pursuant to standardized terms and conditions set forth in such exchange's by-laws, rules or regulations.

First customer – For purposes of this Report, the term “first customer” means: the actual person who submitted the trade for execution – (1) either a trader with direct electronic

access, with the trade cleared by a clearing firm, in which case the direct access trader is the “first customer” of its clearing firm, (2) an individual client who submits an order through an intermediary for execution, in which case the client is the “first customer” of the intermediary or (3) an intermediary trading for its proprietary account, in which case the intermediary is its clearing firm’s first customer.

Futures contract – An agreement to purchase or sell a commodity for delivery in the future: (1) at a price that is determined at initiation of the contract; (2) that obligates each party to the contract to fulfill the contract at the specified price; (3) that is used to assume or shift price risk; (4) that is cleared through a central counterparty; and (5) that may be satisfied by delivery or cash settlement, or may be offset prior to delivery.

Hedge or Hedging – Conduct that is described as permissible “hedging” activity may differ among jurisdictions. Without limiting the scope of any jurisdiction to adopt its own definition, the term “hedge” or “hedging” generally refers to the taking of a position in a commodity derivatives contract opposite to a position held in the physical market to minimize the risk of financial and/or economic loss from an adverse price change, or otherwise for risk management purposes.

For example: The term “hedging” could mean the entering into of a derivatives transaction or a series of derivatives transactions, and the maintaining of the position or positions resulting from the transaction or series of transactions if:

1. the intended effect of the transaction or series of transactions is
 - a) to offset or reduce the risk related to fluctuations in the value of an underlying interest or a position, or of a group of underlying interests or positions; or
 - b) to substitute a risk to one currency for a risk to another currency, provided the aggregate amount of currency risk to which the hedger is exposed is not increased by the substitution;
2. the transaction or series of transactions results in a high degree of negative correlation between changes in the value of the underlying interest or position or group of underlying interests or positions being hedged and changes in the value of the derivatives with which the value of the underlying interests or positions is hedged; and
3. there are reasonable grounds to believe that the transaction or series of transactions no more than offsets the effect of price changes in the underlying interest or position, or group of underlying interests or positions, being hedged.

Index fund – A type of mutual fund that is structured to track the performance of a given market sector, set of assets, or index.

Large positions – The terms “large positions,” “large concentrations” and “large exposures” may be used interchangeably and refer to an open position that is sufficiently large to be potentially prejudicial to orderly market functioning.

Relevant Market Authority – A governmental regulator, a self-regulatory organization or

operator of a regulated market.

Non-commercial participant – A person who does not hedge an underlying physical position, but who trades with the objective of achieving profits through the anticipation of price movements.

Parallel trading – Trading in a derivatives contract in one market that is based on the same, or “related” underlying physical commodity of a derivative contract traded by the same market participant on another market.

Physical commodity – A tangible product or raw material, as opposed to an instrument which references a physical commodity. The term “physical commodity” also can be construed broadly to include electric power or greenhouse gas emission allowances. For convenience, the term “physical commodity” may be referred to as “commodity” throughout the text.

Physical commodity derivatives – Derivatives contracts that reference a physical commodity, physical commodity index or price series and which settle in cash or by delivery of the underlying commodity. For example, futures and OTC contracts, and options on such contracts, where the underlying reference interest is a physical commodity. For convenience, physical commodity derivatives may be referred to as “commodity derivatives” throughout the text.

Physical commodity derivatives markets – Markets that allow for the execution and/or trading of contracts that reference an underlying physical commodity, whether settled in cash or by delivery of a physical commodity. For convenience, physical commodity derivatives markets may be referred to as “commodity derivatives markets” throughout the text.

Physical commodity market – This refers broadly to any forum where the purchase and sale of physical commodities are transacted. The use of the term “market” in this context should be construed broadly and liberally and does not require the existence of a formal, organized market. Accordingly, a physical market could be:

1. an organized, self-regulated central market;
2. a decentralized over-the-counter market; or
3. a local organization, such as a grain elevator or meat processor, which provides a market for a small region.

For convenience, a “physical commodity market” may be referred to as “commodity market” throughout the text.

Price convergence – A movement in the price of a futures contract toward the price of the underlying cash commodity as the contract approaches expiry.

Price Reporting Agencies (PRAs) – PRAs are publishers and information providers who report prices transacted in physical and some derivatives markets and give an informed assessment of price levels at distinct points in time. PRAs also report news stories relevant

to the commodity markets.

Price discovery – The process of determining the price level for a commodity based on supply and demand conditions. Price discovery occurs in both a derivatives market and in the underlying physical market for a particular commodity.

Related Positions, Related Transactions or Related Commodity Market – In general, these terms refer to positions, transactions and markets for physical commodity derivatives or physical commodity markets that are somehow linked or tied economically to the position in the regulated commodity derivatives markets.

- Related positions could be deemed to include a futures contract and physical commodity OTC derivatives contract that reference the same commodity; a futures contract that settles off of the price of another futures contract; a futures contract and a physical commodity position for the same commodity; a futures contract and an “economically equivalent” physical commodity contract. The determination of what constitutes a “related position” is left to the discretion of the relevant Market Authority.

Spoofing – Bidding or offering with the manipulative and deceptive intent to cancel such bid or offer before execution to send false signals of demand or supply in the market.

Spot month – The trading period immediately preceding the delivery period for physically delivered derivatives contracts, cash settled swaps and futures contracts.

- The term “spot month” does not necessarily refer to a calendar month of time. Rather, it is the trading period immediately preceding the delivery/settlement period for physically-delivered futures contracts/cash settled swaps and futures contracts. For example, it may include the delivery period while the futures contract is available for trading (i.e., the contract’s last trading day has not occurred, but delivery is permissible.) The length of this period may vary depending upon the contract terms.

Wash trading – Entering into, or purporting to enter into, transactions to give the appearance that purchases, and sales have been made, without incurring market risk or changing the trader's market position.

Appendix C – Comparison Table, Original Principles vs Revised Principles

The term “Market Authority” used in the Principles means the “relevant” governmental regulator, an SRO or operator of the regulated market. This broad definition is used in order to accommodate the varied supervisory practices in use by IOSCO members.

<i>Original</i>	<i>Revised (New Revision)</i>
<i>Contract Design Principles</i>	
<p><i>Principle: Accountability</i> – Market Authorities should establish a clear framework as to design and review criteria or procedures for commodity derivatives contracts. Market Authorities should be accountable for compliance with statutory and/or self-regulatory standards on a continuing basis and should retain powers to address the provisions of existing contracts which produce manipulative or disorderly conditions. At a minimum a statutory Market Authority should have legal powers to address and where necessary to vary contract provisions which produce, or are deemed likely to produce, manipulative or disorderly conditions.</p>	<p><i>Principle 1: Accountability</i> - <i>Relevant</i> Market Authorities should establish a clear framework of criteria or procedures as to design and review of commodity derivatives contracts, <i>ensuring that the relevant Market Authority</i> retains powers to address or vary the provisions of contracts, which produce manipulative or disorderly conditions, <i>or systemic risk</i>. <i>Relevant</i> Market Authorities should be accountable for compliance with statutory and/or self-regulatory standards on a <i>continuous</i> basis.</p> <p><i>Explanation:</i> Text revised for clarification purposes. The wording “systemic risk” has been added to the Principle, which may need to be addressed, and for which contract provisions may need to be revised.</p>
<p><i>Principle: Economic Utility</i> - Contracts should meet the risk management needs of potential users and promote price discovery of the underlying commodity.</p> <p>The design and/or review of commodity derivatives contracts should include a determination that the contract can meet the risk management needs of potential users of the contract and/or promote price discovery of the underlying commodity. The determination of economic utility may be supported by surveys of potential contract users or may be implied - for example, from an analysis of the physical market.</p> <p>The regulator should, as a minimum requirement, be informed of the type of products to be traded on an exchange or trading system and should review and/or approve the rules governing the trading of the product.</p>	<p><i>Principle 2: Economic Utility</i> - <i>Relevant Market Authorities should ensure that contracts are designed</i> to meet the risk management needs of potential users and promote price discovery of the underlying commodity. <i>Relevant Market Authorities should be informed of contract characteristics and should review and/or approve the contract. Relevant Market Authorities should ensure that the views of participants in the commodity derivatives markets are taken into account in designing commodity derivatives contract.</i></p> <p><i>Explanation:</i> Text revised for clarification purposes. Some part of the text moved under main body text. The original Principle on “Responsiveness” subsumed under new Principle 2.</p>

<p>Principle: Correlation with Physical Market - Contract terms and conditions generally should, to the extent possible, reflect the operation of (i.e., the trading in) the underlying physical market and avoid impediments to delivery.</p>	<p>Principle 3: Correlation with Physical Market - <i>While designing and/or reviewing the commodity derivatives contracts, relevant Market Authorities should ensure that</i> contract terms and conditions should, to the extent possible, reflect the operation of the underlying physical market and avoid impediments to physical delivery of commodities. <i>Relevant Market Authorities should review the contracts under their jurisdiction on a periodic basis for appropriate correlation</i></p>
	<p><i>with the physical market to ensure that the contractual terms and conditions conform to the prevailing physical market practices.</i></p> <p>Explanation: Text revised for clarification purposes and further elaboration.</p>
<p>Principle: Promotion of Price Convergence through Settlement Reliability - Settlement and delivery procedures should reflect the underlying physical market and promote reliable pricing relationships and price convergence and should be regularly evaluated to ensure that they meet this standard. Settlement and delivery terms should be specified and made available to market participants.</p>	<p>Principle 4: Promotion of Price Convergence through Settlement Reliability - <i>Relevant Market Authorities should ensure that</i> settlement and delivery procedures <i>outlined in the contract design</i> reflect the underlying physical market and promote reliable pricing relationships and price convergence and <i>are</i> regularly evaluated to ensure that they meet this standard. Settlement and delivery terms should be specified and made available to market participants.</p> <p>Explanation: Text revised for clarification purposes.</p>
<p>Principle: Responsiveness - The views of potential contract users should be taken into account in designing commodity contracts.</p>	<p>Explanation: See Explanation under Principle 2 “Economic Utility”. The original Principle on “Responsiveness” subsumed under the new Principle 2.</p>

<p>Principle: Transparency - Information concerning a physical commodity derivatives contract's terms and conditions, as well as other relevant information concerning delivery and pricing, should be readily available to Market Authorities with respect to all derivatives transactions within its jurisdiction and to market participants in organized derivatives markets.</p> <p>Without limiting the factors that a Market Authority includes in those terms and conditions, market rules should specify, for example:</p> <ul style="list-style-type: none"> i) Minimum price fluctuations (price ticks); ii) Maximum price fluctuations (daily price limits), if any; iii) Last trading day; iv) Settlement and delivery procedures; v) Trading months; vi) Position limits, if any; vii) Reportable levels; and 	<p>Principle 5: Transparency on Contractual Terms and Conditions - Information concerning a physical commodity derivatives contract's terms and conditions, as well as other relevant information concerning delivery and pricing, should be readily available to the relevant Market Authorities with respect to all derivatives transactions within its jurisdiction and to market participants in organized derivatives markets.</p> <p>Without limiting the factors that a relevant Market Authority includes in those terms and conditions, market rules should specify, for example:</p> <ul style="list-style-type: none"> i. Minimum price fluctuations (price ticks); ii. Maximum price fluctuations (daily price limits), if any; iii. Last trading day; iv. Settlement and delivery procedures; v. Trading months; vi. Position limits, if any;
<ul style="list-style-type: none"> viii) Trading hours. 	<ul style="list-style-type: none"> vii. Reportable levels; viii. Trading hours; and ix. Custody arrangements. <p>Explanation: Title revised for clarification. Last bullet (ix) added.</p>

<i>Principles on Data and Market Transparency</i>	
	<p><i>(New)</i></p> <p>Principle 6: Role of Price Reporting Agencies in Price Assessments - Relevant Market Authorities should consider whether the third-party price or index provider that performs a price assessment function, including a Price Reporting Agency (PRA), considers the Principles for Oil Price Reporting Agencies (PRA Principles).</p>
	<p><i>(New)</i></p> <p>Principle 7: Increased Role of Data and Information – Relevant Market Authorities should consider establishing a “Code of Conduct” for entities who are either independently or jointly involved in collection, dissemination/publication of data and information relating to the underlying commodity and which plays an important role in the price discovery process and timely hedging decisions by non-financial firms.</p>
<p>Principle: Commodity Derivatives Market Transparency - Market Authorities should publish the aggregate exposures of different classes of large traders, especially commercial and non-commercial participants, within the bounds of maintaining trader confidence.</p> <p>Note: In the original Principles, this Principle comes at the very end. For comparison purposes moved up on the Comparison Table.</p>	<p>Principle 8: Public Disclosure - Relevant Market Authorities should publish the aggregate exposures of different classes of large traders, especially commercial and non-commercial market participants, within the bounds of maintaining anonymity of individual market participants.</p> <p>Explanation: Title of the original Principle “Commodity Derivatives Market Transparency” changed to “Public Disclosure,” together with some text revision for clarification purposes.</p>
<p>Principle: OTC Transparency - IOSCO Members should promote the reporting of OTC derivatives contracts to trade repositories in order to improve transparency, mitigate systemic risk, and protect against market abuse in commodity derivatives</p>	<p>Principle 9: OTC Transparency - All IOSCO Members should promote the reporting of OTC derivatives contracts to trade repositories in order to improve transparency, mitigate systemic risk, and protect against market abuse in</p>

<p><i>markets. The relevant governmental regulator of commodity derivatives markets should work with regulators responsible for trade repositories to:</i></p> <p><i>i) evaluate what improvements are appropriate to enhance the usefulness of, and access by regulators to and disclosure to the public of, OTC commodity derivatives markets data that is reported to trade repositories; and</i></p> <p><i>ii) take affirmative steps such as encouraging ongoing work by the industry, rulemaking or recommending legislative changes to achieve these objectives.</i></p> <p>Note: In the original Principles, this Principle comes at the very end. For comparison purposes moved up on the Comparison Table.</p>	<p><i>commodity derivatives markets. The relevant governmental regulator of commodity derivatives markets should work with regulators responsible for trade repositories to:</i></p> <p><i>i) evaluate what improvements are appropriate to enhance the usefulness of, and access by regulators to and disclosure to the public of, OTC commodity derivatives markets data that is reported to trade repositories; and</i></p> <p><i>ii) take affirmative steps such as encouraging ongoing work by the industry, rulemaking or recommending legislative changes to achieve these objectives.</i></p>
---	---

<i>Principles for Market Surveillance: Appropriate framework and resources</i>	
<p>Principle: Framework for Undertaking Market Surveillance - Market Authorities should have a clear and robust framework for conducting market surveillance, compliance and enforcement activities and there should be oversight of these activities. A market surveillance program should take account of a trader’s related derivatives and physical market positions and transactions. Market surveillance programs should be supported by sufficient resources, access to physical market data and analytical capabilities.</p>	<p>Principle 10: Framework for Undertaking Market Surveillance – Relevant Market Authorities should have a clear and robust framework for conducting market surveillance, compliance and enforcement activities and there should be oversight of these activities. A market surveillance program should take account of a trader’s related derivatives and physical market positions and transactions, including the impact of ETPs, where relevant. Market surveillance programs should be supported by sufficient resources, access to physical market data and analytical capabilities.</p> <p>Explanation: Text added to reflect recent market developments related to ETPs.</p>
<p>Principle: Monitoring, Collecting and Analyzing Information – Market Authorities should develop, employ and maintain methods for monitoring of trading activity on the markets they supervise, collecting needed information and analyzing the information they collect that are efficient and suitable for the type of market being supervised. Effective monitoring of orders and electronic transactions requires real-time monitoring capabilities, supported by automated systems that detect trading anomalies. Monitoring, collection and analysis should also focus on intra-day trading.</p>	<p>Principle 11: Monitoring, Collecting and Analyzing Information – Relevant Market Authorities should develop, employ and maintain methods for monitoring of trading activity on the markets they supervise, collecting needed information and analyzing the information they collect that are efficient and suitable for the type of market being supervised. Effective monitoring of orders and electronic transactions requires real-time monitoring capabilities, supported by automated systems that detect trading anomalies. Monitoring, collection and analysis should also focus on intra-day trading.</p>

<i>Authority to Access and Collect Information and the Types of Information that are Needed for the Surveillance of Physical Commodity Derivatives Markets</i>	
<p>Principle: Authority to Access information - Market Authorities should have the authority to access information on a routine and non-routine basis for regulated commodity derivatives markets as well as the power to obtain information on a market participant's positions in related over-the-counter (OTC) commodity derivatives and the underlying physical commodity markets. In particular, Market Authorities should have the power to:</p> <ul style="list-style-type: none"> i) access information that allows the reconstruction of all transactions on a regulated commodity derivatives market (audit trail); ii) access information that permits them to identify large positions (i.e., "large exposures" or "concentrations") and the composition of the market in question; iii) access information, if needed, on the size and beneficial ownership of positions held by a market participant in order to aggregate positions held under common ownership and control; iv) access information about a market participant's transactions and positions in related OTC and physical commodity markets; and v) take appropriate action where a commodity derivatives market participant does not make requested market information available to the Market Authority. <p>Market Authorities should review the scope of their authority to obtain such information and if necessary to request such power from the relevant legislature or other appropriate governmental bodies.</p>	<p>Principle 12: Authority to Obtain Information – <i>Relevant</i> Market Authorities should have the authority to obtain information on a routine and non-routine basis for regulated commodity derivatives markets as well as the power to obtain information on a market participant's positions in related over-the-counter (OTC) commodity derivatives and the underlying physical commodity markets. In particular, relevant Market Authorities should have the power to:</p> <ul style="list-style-type: none"> i) <i>obtain</i> information that allows the reconstruction of all transactions on a regulated commodity derivatives market (audit trail); ii) <i>obtain</i> information that permits them to identify large positions (i.e., "large exposures" or "concentrations") and the composition of the market in question; iii) <i>obtain</i> information, if needed, on the size and beneficial ownership of positions held by a market participant in order to aggregate positions held under common ownership and control; iv) <i>obtain</i> information about a market participant's transactions and positions in related OTC and physical commodity markets; and v) take appropriate action where a commodity derivatives market participant does not make requested market information available to the relevant Market Authority. <p><i>Relevant</i> Market Authorities should review the scope of their authority to obtain such information, and if necessary, to request such power from the relevant legislature or other appropriate governmental bodies.</p> <p>Explanation: Text slightly revised for clarification purposes. The word "obtain" used instead of "access."</p>

<p>Principle: Collection of Information on On-Exchange Transactions – In respect to on-exchange commodity derivatives transactions, a Market Authority should collect information on a routine and regular basis on:</p> <ul style="list-style-type: none"> i) pricing of contracts throughout the trading day in real time; ii) daily transactional information including time and date of trade, commodity contract, delivery month, expiry date, buy/sell, quantity, counterparties to the contract, and price of the contract; 	<p>Principle 13: Collection of Transaction Information on Commodity Derivatives Transactions and Positions for Market Surveillance – In respect of commodity derivatives transactions and positions, a relevant Market Authority should consider what information it should collect on a routine basis and what it should collect on an “as needed” basis. A relevant Market Authority that has access to a relevant Trade Repository’s (TR) data should take such broader access into account, as well as its statutory obligations with respect to the TR, in constructing its data collection policies.</p> <p>Information could include, as appropriate:</p>
<ul style="list-style-type: none"> iii) daily reports of end-of-day positions held by market intermediaries (both “whole firm” and by individual trader) and by other market participants, where the size of the position is above a specified level (“large position”). Information collected should permit a Market Authority to identify each position holder (by name or code) down to the first customer level, and the size of position, by contract month, for each position holder. <p>The Market Authority should have the capability to aggregate position holder information promptly in order to identify positions under common ownership or control;</p> <ul style="list-style-type: none"> iv) where appropriate, warehouse stocks or other deliverable supply. 	<p>For information collected on a routine basis:</p> <ul style="list-style-type: none"> i) transactional information including time and date of transaction, contract terms, counterparties to the contract and price of contract; and ii) position information. <p>For information collected on an “as needed” basis:</p> <ul style="list-style-type: none"> i) delivery intentions; ii) beneficial owners; iii) positions under common control; and iv) for contracts other than forwards, additional information may also need to be sought on notional values, replacement cost, valuation methodology or duration of the contracts. <p>Explanation: Original Principles “Collection of Information on On-Exchange Transactions” and “Collection of OTC Information” merged under new Principle 13. Title of the new Principle revised accordingly.</p>

<p>Principle: Collection of OTC Information – In respect of OTC commodity derivatives transactions and positions, a Market Authority should consider what information it should collect on a routine basis and what it should collect on an “as needed” basis. A Market Authority that has access to a relevant Trade Repository’s (TR) data should take such broader access into account, as well as its statutory obligations with respect to the TR, in constructing its data collection policies.</p> <p>Information could include, as appropriate:</p> <p>For information collected on a routine basis:</p> <ul style="list-style-type: none"> i) transactional information including time and date of transaction, contract terms and, counterparties to the contract and price of contract; and ii) position information. 	<p>Explanation: See Explanation under Principle 13. Original Principles “Collection of Information on On-Exchange Transactions” and “Collection of OTC Information” merged under new Principle 13. Title of the new Principle revised accordingly. Text contained in the original Principle “Collection of Information on On-Exchange Transactions” (bullets i – iv) subsumed under the explanatory text of the new Principles 12 and 13 for clarity purposes.</p>
<p>For information collected on an as needed basis</p> <ul style="list-style-type: none"> i) delivery intentions; ii) beneficial owners; iii) positions under common control; and iv) for contracts other than forwards, additional information may also need to be sought on notional values, replacement cost, valuation methodology or duration of the contracts. 	
<p>Principle: Large Positions – Market Authorities should require the reporting of large trader positions for the relevant on-exchange commodity derivatives contracts. The Market Authority should have the ability to aggregate positions owned by, or beneficially controlled on behalf of, a common owner.</p>	<p>Principle 14: Large Positions – Relevant Market Authorities should require the reporting of large trader positions for the relevant on-exchange commodity derivatives contracts. Relevant Market Authorities should have the ability to aggregate positions owned by, or beneficially controlled on behalf of, a common owner.</p>

Principles to Address Disorderly Commodity Derivatives Markets

Principle: Intervention Powers in the Market - Market Authorities should have, and use, effective powers to intervene in commodity derivatives markets to prevent or address disorderly markets and to ensure the efficiency of the markets. These powers should include the following:

1) Position Management Powers, Including the Power to Set Position Limits - Market Authorities should have and use formal position management powers, including the power to set ex-ante position limits, particularly in the delivery month.

These should necessarily include position management powers that:

i) Establish a trader's automatic consent to follow an order of the Market Authority when that trader's position reaches a defined threshold size or any size, which the Market Authority considers prejudicial to orderly market functioning, taking into account all relevant circumstances. They should also require such a

Principle 15: Intervention Powers in the Market – Relevant Market Authorities should have, and use, effective powers to intervene in commodity derivatives markets to prevent or address disorderly markets and to ensure the efficiency of the markets. These powers should include the following:

1) Position Management Powers, Including the Power to Set Position Limits – Relevant Market Authorities should have and use formal position management powers, including the power to set ex-ante position limits, particularly in the delivery month.

These should necessarily include position management powers that:

i) Establish a trader's automatic consent to follow an order of the **relevant** Market Authority when that trader's position reaches a defined threshold size or any size, which the **relevant** Market Authority considers prejudicial to orderly market functioning, taking into account all relevant circumstances.

<p>trader to comply with the Market Authority's order, either not to increase a position or to decrease a position; and</p> <p>ii) Authorize a Market Authority to place ex-ante restrictions on the size of a position a market participant can take in a commodity derivatives contract (i.e., position limits).</p> <p>2) Other Discretionary Powers - Market Authorities should also have the powers to employ any of the following measures, as appropriate to address market disruption or the perceived threat of such disruption or to assist market surveillance efforts:</p> <p>i) the imposition of price movement limits;</p> <p>ii) calling for additional margin, either from customers or from clearing members on behalf of their clients;</p> <p>iii) ordering the liquidation or transfer of open positions;</p> <p>iv) suspending or curtailing trading on the market (e.g., trading halts and circuit breakers);</p> <p>v) altering the delivery terms or conditions;</p> <p>vi) cancelling trades;</p> <p>vii) requiring owners of positions to specify delivery intentions; and</p> <p>viii) requiring traders to disclose related OTC derivatives or large physical market positions.</p>	<p>They should also require such a trader to comply with the <i>relevant</i> Market Authority's order, either not to increase a position or to decrease a position; and</p> <p>ii) Authorize a <i>relevant</i> Market Authority to place ex-ante restrictions on the size of a position a market participant can take in a commodity derivatives contract (i.e., position limits).</p> <p>2) Other Discretionary Powers – Relevant Market Authorities should also have the powers to employ any of the following measures, as appropriate to address market disruption or the perceived threat of such disruption or to assist market surveillance efforts:</p> <p>i) the imposition of price movement limits;</p> <p>ii) calling for additional margin, either from customers or from clearing members on behalf of their clients;</p> <p>iii) ordering the liquidation or transfer of open positions;</p> <p>iv) suspending or curtailing trading on the market (e.g., trading halts and circuit breakers);</p> <p>v) altering the delivery terms or conditions;</p> <p>vi) cancelling trades;</p> <p>vii) requiring owners of positions to specify delivery intentions; and</p> <p>viii) requiring traders to disclose related OTC derivatives or large physical market positions.</p>
	<p>(New)</p> <p>Principle 16: Unexpected Disruptions in the Market - Relevant Market Authorities should have a process to respond to unexpected disruptions in commodity derivatives markets and the power to intervene, as necessary, in order to restore orderly markets in the event of an unexpected disruption and ensure market participants have a process and adequate plans to address unexpected disruptions.</p>

Principle: Review of Evolving Practices - Market Authorities should have, or contribute to, a process to review the perimeter of regulation to ensure that they have the power to address evolving trading practices that might result in a disorderly market. Exchanges and self-regulatory organizations play a critical and complementary role with governmental regulators in identifying such practices.

Principle 17: Review of Evolving Practices – Relevant Market Authorities should have, or contribute to, a process to review the perimeter of regulation to ensure that they have the power to address evolving trading practices that might result in a disorderly market. Exchanges and self-regulatory organizations play a critical and complementary role with governmental regulators in identifying such practices.

Principles for Enforcement and Information Sharing

<p>Principle: Rules and Compliance Programs - Market Authorities should have rules, compliance programs, sanctioning policies and powers to prohibit, detect, prevent and deter abusive practices on their markets, including manipulation or attempted manipulation of the market. The rules and compliance programs should take account of the whole position of the market participant (i.e., all positions under common ownership and control). There should be clarity as to what constitutes manipulative, abusive conduct or other prohibited conduct.</p> <p>Specific practices which Market Authorities should seek to detect and prevent include, among others:</p> <ul style="list-style-type: none"> i) causing, or attempting to cause, artificial pricing in the market; ii) creating a false or misleading appearance of active trading; iii) disseminating false or misleading information in respect of the market or conditions that affect the price of any commodity; iv) creating, or attempting to create, a corner or squeeze, in which an abusive controlling position is accumulated in the physical and/or futures or OTC markets, forcing those holding short positions to settle their obligations, by purchase or offset or otherwise, to their detriment; v) abuse relating to customer orders; vi) "wash trades", involving no change of beneficial ownership or economic purpose; vii) collusive trades, which seek improperly to avoid exposure to the pricing mechanism of the market; 	<p>Principle 18: Rules and Compliance Programs – Relevant Market Authorities should have rules, compliance programs, sanctioning policies and powers to prohibit, detect, prevent and deter abusive practices on their markets, including manipulation or attempted manipulation of the market. The rules and compliance programs should take account of the whole position of the market participant (i.e., all positions under common ownership and control). There should be clarity as to what constitutes manipulative, abusive conduct or other prohibited conduct.</p> <p>Specific practices which relevant Market Authorities should seek to detect and prevent include, among others:</p> <ul style="list-style-type: none"> i) causing, or attempting to cause, artificial pricing in the market; ii) creating a false or misleading appearance of active trading; iii) disseminating false or misleading information in respect of the market or conditions that affect the price of any commodity; iv) creating, or attempting to create, a corner or squeeze, in which an abusive controlling position is accumulated in the physical and/or futures or OTC markets, forcing those holding short positions to settle their obligations, by purchase or offset or otherwise, to their detriment; v) abuse relating to customer orders; vi) "wash trades", involving no change of beneficial ownership or economic purpose; vii) collusive trades, which seek improperly to avoid exposure to the pricing mechanism of the market;
<ul style="list-style-type: none"> viii) violation of applicable position limits; ix) concealment of a position holder's identity and, x) misuse of information. 	<ul style="list-style-type: none"> viii) violation of applicable position limits; ix) concealment of a position holder's identity; and x) misuse of information.

<p>Principle: Framework for Addressing Multi-Market Abusive Trading - The overall framework for market surveillance and enforcement within a jurisdiction should be structured to provide for active and coordinated detection and enforcement action against manipulative or abusive schemes that might affect trading on multiple exchange and OTC markets, as well as the underlying physical commodity markets.</p>	<p>Principle 19: Framework for Addressing Multi-Market Abusive Trading and Powers and Capacity to Respond to Market Abuse - <i>Relevant Market Authorities should ensure that the regulatory framework for market surveillance and enforcement within a jurisdiction is structured to provide for active and coordinated detection and enforcement action against manipulative or abusive schemes that might affect trading on multiple trading venues and OTC markets, as well as the underlying physical commodity markets.</i></p> <p><i>Relevant Market Authorities should have adequate powers and capacity to investigate and prosecute actual or suspected market abuse, including attempted manipulation.</i></p> <p>Explanation: The original Principle “Powers and Capacity to Respond to Market Abuse” subsumed under new Principle 19. The MMOU text moved under main body text.</p>
<p>Principle: Powers and Capacity to Respond to Market Abuse - Market Authorities should have adequate powers and capacity to investigate and prosecute actual or suspected market abuse, including attempted manipulation. IOSCO members that are responsible for the oversight of commodity derivatives markets should have all of the powers required by the IOSCO Multilateral Memorandum of Understanding Concerning Consultation and Cooperation and the Exchange of Information (MMOU).</p>	<p>Explanation: See Explanation under Principle 19. The original Principle “Powers and Capacity to Respond to Market Abuse” subsumed under new Principle 19. The MMOU text moved under main body text.</p>

Powers over Market Members and Non-Market Members

<p>Principle: Disciplinary Sanctions Against Market Members - The relevant Market Authority should have and use effective powers to discipline its members or other authorized market participants if an abusive practice has occurred in the market. There should be clarity as to the types of disciplinary actions which can be taken.</p>	<p>Principle 20: Disciplinary Actions Against Market and Non-Market Members - Relevant Market Authorities should have and use effective powers to discipline its members or other authorized market participants if an abusive practice has</p>
<p>Sanctions should, amongst other things, include some or all of the following measures:</p> <ul style="list-style-type: none"> i) warnings (public and private); ii) reprimands; iii) re-training; iv) restitution; v) disgorgement of illicit gains vi) fines; vii) conditions on trading; viii) trading prohibitions; ix) suspension from membership; x) expulsion from membership; and xi) where appropriate, a criminal referral. 	<p>occurred in the market. There should be clarity as to the types of disciplinary actions which can be taken.</p> <p>Relevant Market Authorities should have power to take action against non-members of regulated commodity derivatives markets or other market participants if they have engaged in abusive or manipulative practices or are suspected of doing so. Relevant Market Authorities may require contractual relationships between members and customers that enable action to be taken.</p> <p>In addition, relevant Market Authorities should be able to intervene, or cause the exchange to intervene, in the market to address or to prevent an abuse by non-members, using appropriate measures - through members - such as for example by raising the level of margin, imposing trading limits and liquidating positions, as well as removing trading privileges. Any intervention action should be timely.</p> <p>Explanation: The original Principles “Disciplinary Sanctions Against Market Members” and “Disciplinary Sanctions Against Non-Members of the Market” merged under new Principle 20. The sanction types cited moved under main body text.</p>

<p>Principle: Disciplinary Sanctions Against Non-Members of the Market - <i>The relevant Market Authority should have power to take action against non-members of regulated commodity derivatives markets or other market participants if they have engaged in abusive or manipulative practices or are suspected of doing so. Market authorities may require contractual relationships between members and customers that enable action to be taken. It is anticipated that enforcement powers will usually be embedded in statute and would be exercised by a government body, including a public prosecutor or the courts.</i></p> <p><i>In addition, Market Authorities should be able to intervene, or cause the exchange to intervene, in the market to address or to prevent an abuse by non-members, using appropriate measures - through members - such as for example by raising the level of margin, imposing trading limits and liquidating positions, as well as removing trading privileges. Any intervention action should be timely.</i></p>	<p>Explanation: See Explanation under Principle 20. The original Principles “Disciplinary Sanctions Against Market Members” and “Disciplinary Sanctions Against Non-Members of the Market” merged under new Principle 20. The sanction types cited moved under main body text.</p>

Principle: Information Sharing – Market Authorities should cooperate with one another, both domestically and outside the jurisdiction, to share information for surveillance and disciplinary purposes. In particular Market Authorities should have arrangements that allow them to share information on large exposures in linked markets and on supplies relative to these markets. These arrangements should take account of (as applicable):

i) The Exchange International Information Sharing Memorandum of Understanding and Agreement (Exchange International MOU) and the Declaration on Cooperation and Supervision of International Futures Exchanges and Clearing Organizations (Declaration), which facilitate the identification of large exposures by firms that could have a potentially adverse effect on multiple markets;

ii) The IOSCO Multilateral Memorandum of Understanding Concerning Consultation and Cooperation and the Exchange of Information (MMOU); and

iii) Guidance issued by IOSCO in respect of information sharing, such as IOSCO's Principles Regarding Cross-Border Supervisory Cooperation, Report on Multi-jurisdictional Information Sharing for Market Oversight, and Guidance on Information Sharing.

Information sharing to facilitate heightened surveillance is warranted where physical commodity derivatives contracts trade on different exchanges and are linked economically, such as where one contract's settlement price is determined by reference to the settlement price of the other contract.

Principle 21: Information Sharing – **Relevant** Market Authorities should cooperate with one another, both domestically and outside the jurisdiction, to share information for surveillance and disciplinary purposes, **including establishing arrangements** that allow them to share information on large exposures in linked markets and on **physical commodity supplies for** these markets. These arrangements should take account of (as applicable):

i) The Exchange International Information Sharing Memorandum of Understanding and Agreement (Exchange International MOU) and the Declaration on Cooperation and Supervision of International Futures Exchanges and Clearing Organizations (Declaration), which facilitate the identification of large exposures by firms that could have a potentially adverse effect on multiple markets;

ii) The IOSCO Multilateral Memorandum of Understanding Concerning Consultation and Cooperation and the Exchange of Information (MMOU); and

iii) Guidance issued by IOSCO in respect of information sharing, such as IOSCO's Principles Regarding Cross-Border Supervisory Cooperation, Report on Multi-jurisdictional Information Sharing for Market Oversight, and Guidance on Information Sharing.

Information sharing to facilitate heightened surveillance is warranted where physical commodity derivatives contracts trade on different exchanges and are linked economically, such as where one contract's settlement price is determined by reference to the settlement price of the other contract.

Explanation: Text slightly revised for clarification purposes.

<i>Markets Principles on Technological Developments in Commodity Derivatives Markets</i>	
	<p><i>(New)</i></p> <p>Principle 22: Direct Access - Where direct access to commodity derivative markets is offered or permitted, relevant Market Authorities should ensure that a</p>
	<p><i>clear framework, including appropriate policies and controls, is in place to facilitate such direct access by market participants, including non-financial firms.</i></p>
	<p><i>(New)</i></p> <p>Principle 23: Role of High Frequency Trading and Algorithmic Trading in Commodity Derivatives Markets – Relevant Market Authorities and regulated trading venues should have in place a clear framework of policies and controls to analyze the impact of high frequency and algorithmic trading in commodity derivative markets.</p>

Principles on Promotion of Investor Education and Awareness

(New)

Principle 24: Promotion of Investor Education in Commodity Derivatives Markets - Relevant Market Authorities should put in place an appropriate mechanism for promoting investor education amongst market participants and the general public about the potential benefits of the commodity derivatives markets. Relevant Market Authorities should also inform the public and retail investors, about the unique risks associated with investing in commodity derivatives particularly during times of market stress and extreme volatility.