

Thematic Review on OTC Derivatives Trade Reporting

Peer Review Report

4 November 2015

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Foreword

Financial Stability Board (FSB) member jurisdictions have committed, under the FSB Charter and in the *FSB Framework for Strengthening Adherence to International Standards*,¹ to undergo periodic peer reviews. To fulfil this responsibility, the FSB has established a regular programme of country and thematic peer reviews of its member jurisdictions.

Thematic reviews focus on the implementation and effectiveness across the FSB membership of international financial standards developed by standard-setting bodies and policies agreed within the FSB in a particular area important for global financial stability. Thematic reviews may also analyse other areas important for global financial stability where international standards or policies do not yet exist. The objectives of the reviews are to encourage consistent cross-country and cross-sector implementation; to evaluate (where possible) the extent to which standards and policies have had their intended results; and to identify gaps and weaknesses in reviewed areas and to make recommendations for potential follow-up (including via the development of new standards) by FSB members.

This report describes the findings of the thematic review on reporting of OTC derivatives transactions to trade repositories, including the key elements of the discussion in the FSB Standing Committee on Standards Implementation. It is the tenth thematic review conducted by the FSB, and it is based on the objectives and guidelines for the conduct of peer reviews set forth in the Handbook for FSB Peer Reviews.² The draft report for discussion was prepared by a team chaired by Luiz Pereira da Silva (Central Bank of Brazil), comprising Srinivas Bangarbale (US Commodity Futures Trading Commission), Caren Cox (Federal Reserve Bank of New York), Victoria Hinton (until July 2015; UK Financial Conduct Authority), Daryl Ho (Hong Kong Monetary Authority), Laurent Kersenbaume (Banque de France), Chris Kiew-Smith (from June 2015; UK Financial Conduct Authority), Franziska Löw (until April 2015; Swiss State Secretariat for International Financial Matters), Eric Pan (US Securities and Exchange Commission), Joshua Slive (Bank of Canada), and Amandine Zelenko (European Securities and Markets Authority). Mark Chambers and Uzma Wahhab (FSB Secretariat) provided support to the team and contributed to the preparation of the peer review report.

¹ FSB (2010), *FSB Framework for Strengthening Adherence to International Standards*, January; available at: http://www.financialstabilityboard.org/publications/r_100109a.pdf.

² FSB (2015), *Handbook for FSB Peer Reviews*, March (revised); available at: <http://www.financialstabilityboard.org/2015/03/handbook-for-fsb-peer-reviews/>.

Executive Summary

G20 Leaders agreed in September 2009, as part of their overall commitments to reform over-the-counter (OTC) derivatives markets, that OTC derivative contracts should be reported to trade repositories (TRs), and asked the FSB and its relevant members to assess regularly implementation and whether it is sufficient to improve transparency in the derivatives markets, mitigate systemic risk, and protect against market abuse.

The FSB has undertaken a thematic peer review of OTC derivatives trade reporting, with the main objectives being to review the extent of reporting across jurisdictions, to identify any legal barriers that prevent or hinder reporting of complete transaction information to TRs or that limit authorities' access to information held in TRs, and to identify other challenges to effective reporting to TRs. The G20 remains focused on the successful implementation of trade reporting, and in September 2015 the G20 Finance Ministers and Central Bank Governors stated "We will work to address legal barriers to the reporting of OTC derivatives contracts to trade repositories and to the cross-border access of authorities to trade repository data, as well as to improve the usability of that data."³

Overall, comprehensive reporting is in place in the majority of FSB member jurisdictions, in terms of the coverage of transactions that are being reported to TRs. However, reporting is not comprehensive in some jurisdictions, particularly outside the largest asset classes. Further steps in implementation are therefore needed by some jurisdictions, and jurisdictions should seek to ensure that any exemptions or limitations in reporting requirements do not undermine the G20 goal of comprehensive reporting.

As jurisdictions' trade reporting frameworks have been put into effect, a widespread concern of authorities has been the existence of legal barriers to reporting complete transaction information. In particular, in some cases legal barriers prohibit reporting counterparty-identifying information, while in other cases legal barriers prohibit reporting any information about a trade. Authorities have raised concerns that restrictions on reporting complete data limit the usefulness of TR-held data to authorities in carrying out their regulatory mandates, including monitoring and analysing systemic risk and market activity. Similarly, authorities have expressed concerns in relation to barriers to their access to TR-held data, since complete and timely access to this data is intended to be a key resource for authorities in fulfilling their respective mandates.

Barriers to reporting are widespread among FSB member jurisdictions, particularly in the case of reporting pursuant to foreign reporting requirements. While in many cases these barriers can be overcome through obtaining counterparty consent or authority authorisation, or through equivalence and recognition frameworks, in other cases barriers cannot be addressed in these ways. FSB members have therefore agreed that jurisdictions should remove barriers to reporting complete information by June 2018 at the latest, and that masking of counterparty-identifying data be discontinued by end-2018 once barriers to reporting are removed. By June 2018 at the latest, jurisdictions should also permit trade participants to provide standing consent where consent is required to report trade data.

³ G20 Finance Ministers and Central Bank Governors, 4–5 September 2015, Ankara, Meeting Communiqué, paragraph 9; available at: <https://g20.org/wp-content/uploads/2015/09/September-FMCBG-Communique.pdf>.

As with barriers to reporting, impediments to authorities' access to TR-held data are widespread. Restrictions to effective access for relevant domestic authorities are evident within some jurisdictions, and there are very few effective arrangements established for cross-border access by foreign authorities to TR-held data. To address these access issues, FSB members have agreed that by June 2018 at the latest all jurisdictions should have legal frameworks in place to permit access to data held in a domestic TR by domestic authorities and by foreign authorities, on the basis of these authorities' mandates and in accordance with their domestic regulatory regimes. Direct access for both domestic and foreign authorities is the preferred arrangement, consistent with existing guidance from the Committee on Payments and Market Infrastructures (CPMI) and the International Organization of Securities Commissions (IOSCO). Jurisdictions should also take steps as necessary for the establishment and effective operation of cooperative arrangements that support authorities' access to TR-held data, consistent with the responsibilities for authorities set out by CPMI and IOSCO.

Beyond barriers to reporting and authorities' access, there are a range of challenges in the quality and usability of TR-held data; resolving these issues is critical to ensuring the effectiveness of trade reporting. Although the majority of FSB member jurisdictions have introduced trade reporting obligations, the usefulness of this data is being limited by data quality issues (including the formatting, completeness and accuracy of data). As well, given that the current TR landscape consists of a relatively large number of TRs located within and across numerous jurisdictions, differences in the details of reporting requirements among TRs and jurisdictions have made it very challenging to aggregate or compare data from different sources. Notwithstanding these challenges, some authorities are starting to make good use of data for some regulatory purposes, and there is likely to be some mutual benefit to authorities in sharing experiences in using TR data.

Several workstreams under the auspices of the CPMI, FSB and IOSCO are underway which, once completed and adopted, are expected to make significant progress in improving the quality and usability of TR-held data. In particular, the work of CPMI, FSB and IOSCO in following up on the report of the Aggregation Feasibility Study Group⁴ is needed to help overcome these challenges. CPMI and IOSCO have begun issuing a series of consultation reports, and by 2017 aim to have finalised guidance to authorities to help globally harmonise the use of key identifiers and data elements in trade reporting. Once this guidance is finalised and global systems (including decisions on governance) for these identifiers are operational, it will be important that jurisdictions do not delay implementation of these identifiers in their trade reporting frameworks, since this should significantly improve the usability of TR-held data to effectively support regulators' mandates. Other follow-up work on the Aggregation Feasibility Study is also needed, including evaluating (before any formal global aggregation mechanism project is launched) the legal, operational, cost and governance aspects of a global aggregation mechanism that would meet the range of authorities' data access needs.

In summary, most jurisdictions have made and are making substantial reforms to their regulatory regimes to meet the G20 commitment that OTC derivatives should be reported to TRs, and good progress in implementation is underway. To ensure that reporting of OTC

⁴ For more detail on these agreed steps, see FSB (2014), Press release: publication of *Feasibility study on approaches to aggregate OTC derivatives data*, 19 September; available at: http://www.financialstabilityboard.org/2014/09/pr_140919/.

derivative transactions delivers on the G20's goals, further work needs to be undertaken, including addressing various issues that span the extent of reporting, legal barriers to reporting and authorities' access, and operational and technical frameworks to support data quality and usability. To monitor progress on this report's recommendations, FSB member jurisdictions will be asked to report to the FSB by June 2016 on their planned actions. The FSB will also monitor progress on these recommendations as part of its regular reporting on the implementation of OTC derivatives market reforms.

Summary of Findings

The key findings of this report are as follows:

Extent of reporting

Finding 1. The majority of FSB member jurisdictions have in place trade reporting requirements that cover most OTC derivatives transactions by most market participants.

Legal barriers to reporting complete data to TRs

Finding 2. For the purposes of domestic reporting requirements, in most jurisdictions there are no material barriers for reporting to domestic TRs or TR-like entities. Reporting to foreign TRs or TR-like entities to fulfil domestic reporting requirements is also possible in many but not all jurisdictions.

Finding 3. In the case of reporting to a TR or TR-like entity pursuant to foreign reporting requirements, barriers are widespread. In many cases such barriers can be overcome through obtaining counterparty consent or receiving authority authorisation.

Finding 4. In the case of market participants' voluntary reporting to TRs or TR-like entities, barriers are widespread and in most cases are similar to barriers applicable to reporting pursuant to foreign requirements. In some cases such barriers can be overcome through obtaining counterparty consent or receiving authority authorisation.

Finding 5. Masking of counterparty identifying information occurs in only a small number of jurisdictions.

Finding 6. Certain jurisdictions are considering measures for eliminating any legal barriers to reporting that have been identified.

Authorities' access to TR-held data

Finding 7. While in most cases there are no barriers to domestic authorities' access to TR data reported under domestic rules, in a small number of jurisdictions only the authority with primary responsibility for regulating the TR has access.

Finding 8. Foreign authorities' direct access to TR data is generally quite limited; only a small number of jurisdictions have effective frameworks in place to facilitate

direct access, and there are only a few examples where such access arrangements have been established.

Finding 9. Foreign authorities' indirect access to TR data is theoretically possible in many jurisdictions' regulatory frameworks, though with varying degrees of conditionality and no effective example yet.

Finding 10. Significant investments may be necessary to overcome the challenges of data fragmentation and to transform TR-held data into useful information.

Data quality and use of data

Finding 11. Inadequacies in data standards, both nationally and internationally, have inhibited the implementation of quality controls and reduced the quality of data reported to TRs.

Finding 12. Currently, the lack of consistent, harmonised trade and product identifiers and uneven use of the global Legal Entity Identifier, as well as access limitations, makes it difficult for many authorities to accurately aggregate and analyse data, even within some jurisdictions, and especially on a cross-border basis.

Finding 13. The most progress is being made to improve data quality where market participants, TRs and authorities jointly take responsibility for creating and reporting high-quality data and where international authorities are coordinating.

Finding 14. Some jurisdictions require TRs to publicly disseminate anonymised transaction-level data. Public disclosure of aggregate-level data is also required in many jurisdictions. Some jurisdictions do not currently have any public disclosure requirements.

Finding 15. Notwithstanding the issues noted above regarding access and quality, several authorities are already making good use of TR data for certain purposes.

Recommendations

In light of the findings of the report, the following are four sets of specific recommendations to jurisdictions, authorities, TRs and market participants:

1. Comprehensiveness of reporting

- 1A.** Jurisdictions that have not fully implemented reporting requirements should do so promptly.
- 1B.** In order to ensure comprehensive reporting of OTC derivative transactions, jurisdictions should seek to ensure that any exemptions or limitations to reporting are periodically reviewed to minimise the possibility of risks building up in unseen parts of the market.

2. Barriers to reporting information into TRs or TR-like entities

- 2A.** Where barriers to full reporting of trade information (including counterparty information) exist within a jurisdiction's legal and regulatory framework, such barriers should be removed by June 2018 at the latest, with respect to reporting pursuant to domestic and foreign requirements.⁵
- 2B.** Where there is a requirement in a jurisdiction's legal and regulatory framework that a trade participant must obtain a counterparty's consent to report trade data, by June 2018 at the latest all jurisdictions should permit transaction counterparties to provide standing consent to the reporting of such data to any domestic or foreign TR.
- 2C.** Masking of newly reported transactions should be discontinued by end-2018 once barriers to reporting are removed, since masking prevents comprehensive reporting.

By June 2016 jurisdictions should report what actions are planned to address these barriers to reporting trade information.

3. Authorities' access to TR-held data

- 3A.** By June 2018 at the latest all jurisdictions should have a legal framework in place to permit access to data held in a domestic TR by domestic authorities and by foreign authorities, on the basis of these authorities' mandates and in accordance with the domestic regulatory regime.⁶
- The legal framework should include eliminating the conditions that, in practice, prevent this access.⁷
 - In general, consistent with the recommendations of the CPMI–IOSCO 2013 report on authorities' access to TR-held data, it is preferable that access to relevant data held in TRs be direct rather than indirect access, to

⁵ In some jurisdictions there are restrictions or prohibitions on the use of certain types of counterparty identifying information, particularly in relation to natural persons (for instance, national identity numbers or social security numbers), that may affect what types of information can legally be included in transaction reports. In such cases, jurisdictions should ensure other counterparty identifying information is able to be included in transaction reports made pursuant to domestic or foreign requirements so as to prevent counterparty anonymity.

⁶ For more details on the level of data access in the relation to the authorities' functional mandates, please refer to CPMI–IOSCO (2013), *Authorities' access to trade repository data*, August; available at: <http://www.bis.org/cpmi/publ/d110.htm> and <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD417.pdf>.

⁷ Legal frameworks, processes and procedures, and any TR-related cooperative arrangements for authorities' access should be consistent with the recommendations of the CPMI–IOSCO 2013 report on authorities' access to TR-held data, and consistent with Responsibility E of the CPMI–IOSCO Principles for Financial Market Infrastructures which states: "Central banks, market regulators, and other relevant authorities should cooperate with each other, both domestically and internationally, as appropriate, in promoting the safety and efficiency of FMIs." Within this Responsibility, key consideration 8 states: "Relevant authorities should coordinate to ensure timely access to trade data recorded in a TR." See CPMI–IOSCO (2012), *Principles for financial market infrastructures*, April, pp.133–137; available at: <http://www.bis.org/cpmi/publ/d101a.pdf> and <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD377-PFMI.pdf>.

enable authorities to have continuous and un-intermediated access to relevant TR-held data.⁸

- 3B.** All relevant authorities should coordinate in establishing cooperative arrangements that facilitate authorities' access to TR-held data (whether it be through direct or indirect access).⁷
- 3C.** Authorities and TRs should work together, as appropriate, to facilitate the creation of appropriate operational frameworks that facilitate access to TR-held data, whether direct or indirect.

By June 2016 jurisdictions should report what actions are planned to permit and facilitate authorities' access to data held in a domestic TR.

4. Usability of TR data

- 4A.** Authorities, TRs and market participants should work together to improve TR data quality, including to facilitate improvements in data validation processes.
- 4B.** Since universal global identifiers (such as LEI, UPI, UTI) and harmonised data standards are expected to improve data quality in TRs, jurisdictions are strongly encouraged to support the development and adoption of such identifiers and data standards and should look to international guidance in this area.
- 4C.** Authorities should continue to share knowledge and best practices on how to effectively access, process and interpret TR data.

⁸ See pp.23–24 of the CPMI–IOSCO 2013 report on authorities' access to trade repository data: "In instances where direct access by an authority is blocked because of legal constraints on direct access, the legal framework may provide for indirect access via another authority, which will typically be a TR supervisor or another authority having direct access to the data. In such circumstances, indirect access may be a second best solution to address these situations, but it should be viewed as the exception, not the norm."

1. Introduction

1.1 The G20 commitment for trade reporting of OTC derivatives

At the Pittsburgh Summit in September 2009, G20 Leaders agreed that OTC derivatives contracts should be reported to TRs, in response to the lack of adequate information available during the crisis. This recommendation was aimed at ensuring the reporting, collection, and maintenance of comprehensive data for OTC derivatives “to improve transparency in the derivatives markets, mitigate systemic risk, and protect against market abuse.”

TRs are entities that maintain a centralised electronic record or database of OTC derivatives data. By centralising the collection, storage and dissemination of data, TRs can play an important function in providing information that supports risk reduction, operational efficiency and cost savings for both individual entities and the market as a whole. Reporting OTC derivatives data to a TR enables authorities to have information concerning an OTC derivatives contract shortly after it is entered into, as well as information concerning any changes to the contract throughout its existence. In addition, given their role, TRs are in a position to provide information on OTC derivatives markets that could serve to: (i) enhance transparency of information to relevant authorities and the public; (ii) promote financial stability; and (iii) assist in the detection and prevention of market abuse.

1.2 Underlying goals of the G20 OTC derivatives market reforms and relationship to trade reporting

Improve transparency

The recent financial crisis highlighted a severe lack of transparency in the OTC derivatives markets. The lack of available data during the crisis hindered authorities in effectively carrying out their mandates. It also interfered with the assessment of risks resulting from the build-up of unsustainable exposures, which ultimately led to the collapse or near-collapse of some major financial institutions. Increased transparency through trade reporting may improve the stability of these markets by enhancing the ability of authorities to monitor and detect risks. Some forms of public dissemination of TR data can also promote the understanding of the functioning of OTC derivatives markets by all stakeholders. Reporting to TRs can also facilitate improvements to market participants’ internal transparency regarding their own positions/transactions.

Mitigate systemic risk

Derivatives exposures across large financial institutions can contribute to or may be the source of systemic risk. It is important for authorities to be able to get a comprehensive view of the market participant’s exposures on OTC derivatives markets in a diligent and effective way. During a crisis, lack of adequate understanding of such exposures could compromise the ability of regulators to unwind an institution. More generally, authorities with mandates to

assess systemic risk require access to transaction-level TR-held data⁹ to monitor changes in the size, concentration, interconnectedness, and structure of OTC derivatives markets.

Protect against market abuse

Market abuse may arise in circumstances where some market participants have been unreasonably disadvantaged, directly or indirectly, by others who, for example:

- have used information which is not publicly available (insider trading);
- have distorted the price-setting mechanism of financial instruments; or
- have disseminated false or misleading information.

Market integrity analysis depends on the regulatory community having available accurate and timely information on the activities and positions of counterparties in the markets. The ability to aggregate, compare and relate positions in different markets, via the usage of information held in TRs, is useful to identify and prevent market abuse.

Based on the underlying objectives of the trade reporting reform describe above, we can establish a mapping between these objectives, describing the progress that has been made and the challenges remaining – see Appendix A for a summary table.

1.3 Progress of trade reporting implementation

Creation of TRs and reporting regimes

Some jurisdictions (such as Brazil) had reporting regimes predating the G20 commitments. But the creation of TRs in most jurisdictions did not start until 2009.

Before the creation of formal rules governing TRs, several TRs were created on a voluntary basis through the cooperation of industry and infrastructure providers. In some cases, these TRs were tightly tied to existing post-trade infrastructure used by the major dealers and included DTCC's Trade Information Warehouse and TriOptima's Interest Rate TR (which has since closed).

For this voluntary reporting, there was initially an industry effort to consolidate reporting in a small number of TRs. This included a request for proposals by the International Swaps and Derivatives Association (ISDA) in each derivatives asset class. But competitive pressures as well as regulatory requirements have resulted in a proliferation of TRs and a fragmentation of data across TRs. Aggregation of data from multiple TRs is therefore required to get a complete picture of OTC derivatives markets.

Some jurisdictions have authorities or infrastructure providers that perform some of the data gathering functions of TRs. This report takes a broad view and includes these entities, referring to them, where necessary, as 'TR-like entities'. This report also focuses on TRs that receive regulator-mandated reporting, but also discusses voluntary reporting where appropriate.

⁹ As described in the CPMI-IOSCO 2013 report on authorities' access, this might be named data in relation to institutions and underliers within their respective legal jurisdictions, and anonymised data for other counterparties.

As at end-September 2015, TRs are authorised and operating, for at least one asset class, in 17 of the 24 FSB member jurisdictions; a total of 20 TRs are currently authorised and operating. In addition, in six jurisdictions, government authorities or other TR-like entities are currently collecting OTC derivatives transaction reports. See Table 1 and Table 2 in Appendix B for more details.

Cross-border legal issues in the implementation of trade reporting

As regulatory authorities began introducing mandatory reporting requirements in certain jurisdictions, some market participants informed such authorities that they did not believe they could comply with the reporting requirements because reporting identifying information about the parties to an OTC derivatives transaction could risk violating foreign law or regulation. In response to such concerns, some regulatory authorities are offering regulatory relief from certain reporting requirements, to avoid placing market participants in the position of violating applicable statutory or regulatory requirements. Such relief has permitted reporting parties to “mask” the identity of transaction parties. In this report, reference to “masking” refers to this practice of not revealing full identifying information of a transaction party.

This issue was brought to the attention of the FSB in 2012 and has been discussed in the FSB’s progress reports on implementation of OTC derivatives market reforms, prepared by the OTC Derivatives Working Group.¹⁰

The decision to allow for masking by some authorities may require a legal opinion from market participants that legal barriers exist. Most notably, ISDA delivered a series of letters to the CFTC and ESMA, reporting that a survey of its members revealed there appeared to be statutory or regulatory prohibitions on the reporting of identifying information of one of the transaction parties. In these letters, ISDA requested that authorities in a number of jurisdictions allow masking when the reporting of identifying information of a transaction party may conflict with, or violate, statutory or regulatory requirements. In its most recent correspondence with the CFTC, ISDA indicated this issue may arise in relation to transactions with counterparties from the following jurisdictions: Algeria, Argentina, Austria, Bahrain, People’s Republic of China, Costa Rica, France, Hungary, India, Korea, Luxembourg, Philippines, Romania, Samoa, Singapore, Spain, Switzerland, Taiwan, Uruguay, and Venezuela.

In August 2014 the OTC Derivatives Regulators Group (ODRG)¹¹ wrote a letter to the FSB Chair requesting that the FSB take action to resolve issues relating “to the existence of barriers, including data protection laws, blocking statutes, state secrecy laws, and bank secrecy laws, which can prevent reporting of counterparty-identifying information to trade

¹⁰ See, for instance, FSB (2013), *OTC Derivatives Market Reforms: Fifth progress report on implementation*, April, pp.48–57; available at: http://www.financialstabilityboard.org/wp-content/uploads/r_130415.pdf.

¹¹ The ODRG includes the Principals of the following regulatory authorities with responsibility for regulation of OTC derivatives markets: the Australian Securities and Investment Commission, the Brazilian Comissão de Valores Mobiliários, the European Commission, the European Securities and Markets Authority, the Hong Kong Securities and Futures Commission, the Japanese Financial Services Agency, the Ontario Securities Commission (OSC), the Autorité des marchés financiers du Québec, the Monetary Authority of Singapore, the Swiss Financial Market Supervisory Authority, the US Commodity Futures Trading Commission (CFTC), and the US Securities and Exchange Commission (SEC). For the OSC, CFTC and SEC, references to ‘Principals’ are to the Chairs of their respective agencies and not the full bodies.

repositories.” The ODRG expressed the view that such legal barriers to reporting in certain jurisdictions “are significantly reducing the effectiveness of reporting obligations and impeding the effective supervision of reporting entities, thus contravening the G20’s objectives outlined in the Leaders’ 2009 Pittsburgh communiqué.” In response, the FSB Chair wrote a letter to the ODRG stating that “comprehensive and effective reporting by market participants to trade repositories is a fundamental objective of the G20’s reform commitments, and that all necessary steps should be taken by jurisdictions to ensure this objective is achieved.”

Pursuant to the terms of reference of the peer review, the peer review team has sought to conduct an objective assessment of the existence of legal barriers that may prevent the reporting of identifying information of transaction parties. The peer review looked to determine the existence of legal barriers only in FSB member jurisdictions.

In addition, the peer review team has sought to identify the existence of any legal barriers to authorities’ access to data held in a TR. Authorities have been keen to understand better whether access to data held in TRs in foreign jurisdictions is possible, with this seen by some authorities as a crucial part of ensuring the effectiveness of trade reporting.

1.4 International work

In October 2010, the FSB published a report on implementing OTC derivatives market reforms, which was submitted to the G20 finance ministers and central bank governors.¹² The report sets out a number of recommendations with the objective that “authorities must have a global view of the OTC derivatives markets, through full and timely access to the data needed to carry out their respective mandates. Trade repository data must be comprehensive, uniform and reliable and, if from more than one source, provided in a form that facilitates aggregation on a global scale.”

Consistent with the FSB’s October 2010 report, CPMI and IOSCO worked jointly to develop reporting and aggregation standards, with a final report on this published in January 2012.¹³ The report specifies minimum requirements for reporting data to a TR and for the reporting by a TR to regulators, as well as types of acceptable data formats; as an example, Appendix H provides a list of the minimum set of recommended data fields for interest rate derivatives. It also discusses and makes recommendations for issues relating to authorities’ and reporting entities’ access to data, and disseminating selected OTC derivatives data to the public while taking into account any confidentiality constraints, as well as data aggregation mechanisms and tools needed to enable authorities to aggregate data in a manner that fulfils their regulatory mandates, including methods, rationale and possible tools to implement data aggregation such as legal entity identifiers.

In April 2012, CPMI and IOSCO published the Principles for Financial Market Infrastructures (PFMI), which include additional guidance for TRs and which reiterate the

¹² FSB (2010), *Implementing OTC Derivatives Market Reforms*, October; available at: http://www.financialstabilityboard.org/wp-content/uploads/r_101025.pdf.

¹³ CPMI–IOSCO (2012), *Report on OTC derivatives data reporting and aggregation requirements*, January; available at: <http://www.bis.org/cpmi/publ/d100.pdf> and <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD366.pdf>.

public policy benefits of TRs.¹⁴ Eleven of these principles are addressed to TRs, including principles that discuss: governance; general business risk; operational risk; fair and open access to TRs; communication procedures and standards; disclosure of market data by trade repositories; and coordination between relevant authorities to ensure timely and effective access to trade data recorded in a TR.

A further report by CPMI and IOSCO, published in August 2013, discussed in more detail authorities' access to trade repository data.¹⁵ The aim of this report is to provide guidance to TRs and authorities on access to TR-held OTC derivatives transaction data, as well as possible approaches to addressing confidentiality concerns and access constraints. An important part of the report describes the expected data access needs of authorities using a functional approach complemented by an illustrative data access mapping that aligns each function to the minimum level of access authorities would typically require in support of their mandates and responsibilities.

In August 2015, IOSCO published its analysis of post-trade transparency in CDS markets, examining the potential impact of mandatory post-trade transparency in the credit default swaps market.¹⁶ This report concluded that greater post-trade transparency in the CDS market – which includes making the price and volume of individual transactions publicly available – would be valuable to market participants and other market observers. IOSCO encouraged member jurisdictions to take steps toward enhancing post-trade transparency in their respective CDS market.¹⁷

FSB Aggregation Feasibility Study Group and CPMI–IOSCO work on data harmonisation

In September 2014, the FSB published a study of the feasibility of options for a mechanism to produce and share global aggregated OTC derivatives TR data (Aggregation Feasibility Study).¹⁸ The study pointed out several steps required before a global aggregation mechanism could be implemented, including the need to “study in more detail and address the legal and regulatory changes that would be needed to implement a global aggregation mechanism that would meet the range of authorities' data access needs.” This peer review contributes to addressing this requirement by examining in detail the legal barriers to authorities' access to data.

¹⁴ CPMI–IOSCO (2012), *Principles for financial market infrastructures*, April; available at: <http://www.bis.org/cpmi/publ/d101a.pdf> and <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD377-PFMI.pdf>.

¹⁵ CPMI–IOSCO (2013), *Authorities' access to trade repository data*, August; available at: <http://www.bis.org/cpmi/publ/d110.pdf> and <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD417.pdf>.

¹⁶ IOSCO (2015), *Post-Trade Transparency in the Credit Default Swaps Market*, August; available at: <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD499.pdf>.

¹⁷ The IOSCO 2015 report's recommendations about post-trade transparency referred to regulatory systems that mandate disclosure of information, widely accessible to the public, about the price and volume of each relevant transaction, and not to regulatory structures that allow for voluntary or selective disclosure of data or that require dissemination of data (however widely) only in an aggregate form. Because publicly disseminated information is for the benefit of market participants and the public generally, the report's recommendation to enhance post-trade transparency does not include disclosure of counterparty identity.

¹⁸ FSB (2014), *Feasibility study on approaches to aggregate OTC derivatives data*, September; available at: http://www.financialstabilityboard.org/wp-content/uploads/r_140919.pdf.

The Aggregation Feasibility Study's conclusions also stated that "it is critical for any aggregation option that the work on standardisation and harmonisation of important data elements be completed, including in particular through the global introduction of the Legal Entity Identifier (LEI), and the creation of a Unique Transaction Identifier (UTI) and Unique Product Identifier (UPI)." Following the Aggregation Feasibility Study, the FSB asked the CPMI and IOSCO to develop global guidance on the harmonisation of data elements reported to TRs and important for the aggregation of data by authorities. The FSB also said it would work with CPMI and IOSCO to provide official sector impetus and coordination for the further development and implementation of uniform global UTIs and UPIs.

In November 2014, CPMI and IOSCO therefore established a working group for the harmonisation of key OTC derivatives data elements, including for UTIs and UPIs. The mandate of the Harmonisation Group is to develop guidance regarding the definition, format, and usage of key OTC derivatives data elements, including UTIs and UPIs, and develop global guidance on harmonisation of key data elements that are reported to TRs and are important to aggregation by authorities. In August 2015 a consultative report on harmonisation of UTIs was published,¹⁹ followed by the publication in September 2015 of a consultative report on harmonisation of a first batch of key data elements;²⁰ consultative reports on UPIs and other key data elements will be published in the future. The Harmonisation Group plans to issue its final guidance on UTI, UPI and other data elements from 2016 onwards. Implementation and universal adoption of uniform global UTI and UPI, as well as the already implemented LEI will advance analysis and aggregation work, by establishing consistency in critical fields that support matching of transactions, and provide standard identifiers for unique transactions and associated counterparties.

Preceding this work, authorities have for several years been working on the implementation of a global LEI. The Global LEI Foundation (GLEIF) was formed in June 2014 as a Swiss not-for-profit foundation with the FSB acting as its founder. The GLEIF acts as the operational arm of the Global LEI System. The GLEIF provides on its website a centralised database of LEIs and corresponding reference data. As of 31 December 2014, over 330,000 entities from 189 countries had obtained LEIs from 20 operational issuers. As of June 2015, authorities in 15 FSB member jurisdictions had mandated or suggested the use of the global LEI in OTC derivatives transaction reporting.

1.5 This peer review

The peer review's specific objectives have been:

- to examine the extent to which OTC derivatives contracts are in practice being reported to TRs;

¹⁹ CPMI-IOSCO (2015), *Harmonisation of the Unique Transaction Identifier – Consultative report*, August; available at: <http://www.bis.org/cpmi/publ/d131.pdf> and <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD500.pdf>.

²⁰ CPMI-IOSCO (2015), *Harmonisation of key OTC derivatives data elements (other than UTI and UPI) – first batch – Consultative report*, September; available at: <http://www.bis.org/cpmi/publ/d132.pdf> and <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD503.pdf>.

- to identify legal barriers in national laws and regulations that may prevent or hinder reporting to TRs or that may limit authorities’ domestic and cross-border access to OTC derivatives data in TRs;
- to identify the main other challenges that national authorities may face in achieving comprehensive reporting to TRs of a type that meets the G20 Leaders’ objectives to improve transparency in the OTC derivatives markets, mitigate systemic risk and protect against market abuse; and
- to highlight good practices and lessons learned from experience to date, where appropriate, and to make recommendations to address the identified barriers and challenges in the practical implementation of effective reporting to TRs.

In addition, the TR peer review provides the analysis and recommendations to support the FSB in meeting its commitment to “identify the legal barriers in member jurisdictions to reporting of counterparty information to trade repositories and set a deadline for jurisdictions to address them” by the Antalya Summit, as set forth in the FSB Chair’s February 2015 letter to G20 Ministers and Governors.²¹

The primary sources of information for the peer review were responses to two questionnaires prepared by the review team and agreed by the FSB’s Standing Committee on Standards Implementation: one for national authorities and one for TRs. For the purposes of this peer review, a number of TR-like entities were surveyed along with TRs, given that in several jurisdictions trade reporting is undertaken through reporting facilities (such as government data collection services) that provide similar services as TRs but are not separately authorised as such. Appendix C gives a list of TRs and TR-like entities surveyed.

2. Extent of Reporting²²

FSB member jurisdictions have followed a variety of paths in ensuring that all OTC derivative transactions are reported to TRs. Approaches have in part reflected the nature of local OTC derivatives markets, the particular configuration and responsibilities of regulatory authorities in jurisdictions, the availability of infrastructure needed to support trade reporting, and the extent to which some degree of transaction reporting was already taking place prior to the G20 commitment. Even where trade reporting has been implemented, the scope and availability of data about OTC derivatives markets as a whole has made it difficult to estimate what share of the market is being reported to TRs. As such, within the FSB’s regular monitoring of progress in implementing OTC derivatives market reforms, it has been challenging to understand and compare the extent to which trade reporting has been implemented across jurisdictions.

The peer review team has therefore sought to review jurisdictions’ implementation of OTC derivatives transaction reporting in a way that allows for significant variation in approaches,

²¹ Available at: <http://www.financialstabilityboard.org/2015/02/fsb-chairs-letter-to-g20-on-financial-reforms-finishing-the-post-crisis-agenda-and-moving-forward/>.

²² This section addresses the first of the peer review objectives listed in Section 1.5: to examine the extent to which OTC derivatives contracts are in practice being reported to TRs.

rather than pre-supposing any one ‘best’ approach to implementation. That said, the team has also sought to understand in detail what products and participants are subject to trade reporting requirements in each jurisdiction, and precisely what sort of information regarding each transaction report is required to be reported, in order to build up a picture of the comprehensiveness of trade reporting across jurisdictions.

Finding 1. The majority of FSB member jurisdictions have in place trade reporting requirements that cover most OTC derivatives transactions by most market participants.

In 11 FSB member jurisdictions (counting individual EU member states), including those jurisdictions hosting the largest part of the OTC derivatives market, reporting obligations are in place covering products in all five asset classes. These jurisdictions are: Argentina, Australia, Brazil, Canada, the six participating EU member states, and the US. In addition, Japan, Korea and Mexico have reporting obligations in place covering products in four of the five asset classes.

In eight other jurisdictions, some reporting is in place, while in two jurisdictions no reporting is yet in place. In the two jurisdictions that have yet to implement, they plan to have started reporting by the end of 2016. Three of the eight jurisdictions with partial reporting already in place plan to expand reporting requirements by the end of 2016.

The jurisdictions with the largest OTC derivatives markets subject all transactions to reporting obligations, although some jurisdictions are phasing in these requirements or are limiting requirements only to banks, other large financial institutions and non-financial corporations with large derivatives positions.

A number of jurisdictions report that the requirements in place cover over 90% of the OTC derivatives trading taking place in their jurisdictions. However around a third of jurisdictions have some exemptions in place, allowing OTC derivative transactions of selected types, or traded by certain entity types, or by financial entities with a relatively small notional of OTC derivatives outstanding, not to be reported to TRs.

See Appendix D for more detail: Table 3 provides detail on the coverage of reporting requirements across FSB member jurisdictions, and Table 4 provides detail on the estimated coverage of reporting requirements and exemptions.

Recommendations

- 1A.** Jurisdictions that have not fully implemented reporting requirements should do so promptly.
- 1B.** In order to ensure comprehensive reporting of OTC derivative transactions, jurisdictions should seek to ensure that any exemptions or limitations to reporting are periodically reviewed to minimise the possibility of risks building up in unseen parts of the market.

3. Legal Barriers to Reporting to TRs and TR-like Entities²³

Pursuant to the terms of reference of the peer review, the peer review team has sought to conduct an objective assessment of the existence of legal barriers that may prevent the reporting of identifying information of transaction parties. The peer review team analysed only FSB member jurisdictions to determine the existence of legal barriers in reporting to TRs or TR-like entities.

The issue of legal barriers to reporting to TRs, including privacy laws, secrecy laws and blocking statutes, was previously identified by the FSB and the ODRG as a limitation on the effectiveness of reporting to TRs. The peer review team investigated barriers to reporting to TRs and TR-like entities under three scenarios: reporting in fulfilment of domestic requirements, reporting in fulfilment of foreign requirements, and voluntary reporting. For each scenario, the peer review team collected matrix information on legal barriers to reporting to both domestic and foreign TRs and TR-like entities, by domestic and foreign trade participants, and with respect to domestic and foreign counterparties. The peer review team also considered mechanisms that could be used to overcome legal barriers (such as consent or authorisation) and the existence of the practice of masking, whereby counterparties' identities are completely anonymised. The peer review team took into account pending changes to jurisdictions' legal frameworks, where applicable. The peer review did not seek to identify differences, if any exist, in barriers to reporting TR data with respect to, or by, individuals (natural persons) as opposed to other legal entities.

The findings of the peer review in relation to legal barriers to reporting are set out directly below and in Appendix E.

Finding 2. For the purposes of domestic reporting requirements, in most jurisdictions there are no material barriers for reporting to domestic TRs or TR-like entities. Reporting to foreign TRs or TR-like entities to fulfil domestic reporting requirements is also possible in many but not all jurisdictions.

Reporting to domestic TRs pursuant to domestic reporting requirements. Most jurisdictions allow reporting to a domestic TR to satisfy domestic reporting requirements without additional requirements or limitations. Some jurisdictions, including Korea, Singapore and South Africa, require counterparty consent in some scenarios to report pursuant to domestic reporting requirements.

Reporting to foreign TRs pursuant to domestic reporting requirements. Many jurisdictions allow reporting to an authorised foreign TR to satisfy domestic reporting requirements. The method for approval of the foreign TR may take a variety of forms (e.g. direct registration of the foreign TR with the domestic authority or arrangements with the foreign authority for the domestic authority to obtain direct or indirect access to data held at the foreign TR). For some jurisdictions, including Brazil, Singapore, South Africa and Turkey, counterparty consent is needed in some cases before reporting to any foreign TR to fulfil domestic reporting

²³ This section addresses the first aspect of the second peer review objective listed in Section 1.5: to identify legal barriers in national laws and regulations (such as data privacy laws, secrecy laws, blocking statutes or other laws) that may prevent or hinder reporting OTC derivatives contracts to TRs.

requirements. Reporting to a foreign TR to fulfil domestic requirements is not permitted in Argentina, Hong Kong, India, Indonesia, Korea, Russia and Saudi Arabia.

Reporting to TR-like entities pursuant to domestic reporting requirements. The peer review team also asked jurisdictions about legal restrictions on reporting to TR-like entities. A TR-like entity is an entity, facility, service, utility, or government authority that is not an authorised TR but that is used by market participants to report OTC derivatives trade data or that provides TR-like services. Most jurisdictions have not considered the possibility of permitting reporting to TR-like entities. To the extent TR-like entities exist, most jurisdictions indicate that for purpose of considering legal barriers, reporting to a TR-like entity would be treated the same as reporting to a TR.

See Table 5 in Appendix E for more information.

Finding 3. In the case of reporting to a TR or TR-like entity pursuant to foreign reporting requirements, barriers are widespread. In many cases such barriers can be overcome through obtaining counterparty consent or receiving authority authorisation.

In some instances reporting pursuant to foreign reporting requirements faces legal barriers. For example, two common scenarios include: (i) cross-border transactions where one counterparty is required to report to a TR and the other counterparty is from a jurisdiction with privacy, data protection and/or blocking laws that would be applicable in reporting to that TR; and (ii) where a market participant may be subject to both foreign and domestic reporting requirements (e.g. dual registrants). Legal barriers to reporting pursuant to foreign reporting requirements may take different forms, including data protection laws, client confidentiality laws, or blocking statutes. The application of legal barriers may vary depending on a particular reporting scenario, such as whether reporting is made to a domestic or foreign TR, is made by a domestic or foreign reporting entity, or is made regarding a domestic or foreign counterparty. In some cases, barriers may be overcome by consent or authority authorisation. The discussion below categorises the peer review observations as they relate to reporting to foreign and domestic TRs, in each case first listing jurisdictions where reporting is permitted and not permitted, followed by a discussion of jurisdictions where reporting is permitted only in some cases or subject to certain conditions (i.e. with consent or authorisation).

Reporting to foreign TRs pursuant to foreign requirements

Reporting not permitted: Mexico does not permit a domestic trade participant to report directly to a foreign non-recognised TR to satisfy foreign requirements applicable to the Mexican trade participant.²⁴ Mexico's prohibition applies only with respect to trades entered into in Mexico.

Reporting permitted. Argentina, Canada, Germany, Hong Kong, Italy, Japan, Russia, the UK and the US allow domestic trade participants to report to a foreign TR pursuant to foreign

²⁴ In April 2015, Banco de México issued amendments to its Circular 4/2012 ("Reglas para operaciones derivadas") that include among other aspects, the possibility of recognising foreign TRs to which entities could report derivative transactions entered into in Mexico.

requirements without restriction. Turkey is in the process of drafting regulation on reporting by domestic counterparties to TRs to satisfy foreign reporting requirements, therefore whether reporting to a foreign TR will be allowed has not yet been determined.

Argentina, Canada, Germany, Hong Kong, Italy, Japan, Mexico, Russia, Switzerland, the UK and the US allow foreign counterparties to report to foreign TRs about transactions with domestic counterparties without restriction.

Reporting to domestic TRs pursuant to foreign reporting requirements

Reporting permitted. Certain jurisdictions allow reporting to a domestic TR to fulfil foreign reporting obligations. Argentina, Brazil, Canada, Germany, Hong Kong, Italy, Russia, Saudi Arabia, the UK and the US reported no legal barriers for market participants to report to domestic TRs or TR-like entities pursuant to foreign reporting requirements. However, not all TRs and TR-like entities in each of these jurisdictions would in practice accept all such reports because the foreign reporting requirements may cover information for which the TR or TR-like entity does not have appropriate infrastructure to receive, validate and store.

European Union. While the European Commission (EC) reported no EU-wide legal barriers to reporting to any TR for the purposes of foreign reporting requirements (stemming from either dual registration or foreign counterparty reporting requirements), some EU member states (such as France, the Netherlands and Spain) reported legal barriers to such reporting under their respective national laws, although these barriers would be overcome in case of a foreign reporting regime that has been declared equivalent by the European Commission (see below).

In addition, France has provided information about its blocking statute. France reported that when the third country has not been declared equivalent in accordance with EMIR, its blocking statute might apply under specific and strictly defined conditions. Indeed, the French blocking statute would only cover cases where the reporting is leading to the constitution of evidence with a view to, or in connection with, a foreign judicial or administrative proceeding. France reported that the scope of the blocking statute should be interpreted restrictively since the blocking law is a penal law, and therefore confirmed that the blocking statute would not apply to reporting to TRs that is made on a regular basis in accordance with a foreign reporting regime.

China and Indonesia. China and Indonesia did not provide complete information about legal barriers to reporting to foreign TRs or TR-like entities. Chinese authorities indicated, however, that they plan to study issues related to reporting to TRs pursuant to requirements of foreign regulatory authorities.

See Table 6 in Appendix E for more information.

Reporting to domestic or foreign TRs pursuant to foreign requirements permitted in some cases or subject to certain conditions

Consent. A significant number of jurisdictions, including Australia, Brazil, France, India, Japan, Korea, the Netherlands, Singapore, South Africa, Spain, Switzerland and Turkey, indicated that some form of counterparty consent would be required in some cases to report pursuant to foreign reporting requirements. The factual circumstances that would trigger a jurisdiction's requirement to obtain such consent differ. Sometimes consent must be given on a trade-by-trade basis. In other cases, a counterparty can provide "standing consent" which

means providing consent at one time to cover a string of transactions (e.g. in a master agreement). However, the peer review team did not collect comprehensive information on what particular kind of consent would be required in different jurisdictions and/or scenarios.

Authorisation. Generally jurisdictions do not require the obtaining of authorisation before reporting trade data to a TR, but some exceptions exist. For Switzerland, due to the Swiss criminal code, domestic trade participants at present require permission of a Swiss federal authority to report to a foreign TR or TR-like entity pursuant to foreign reporting requirements. Switzerland reported that, pursuant to its new legal regime due to take effect on 1 January 2016, this requirement will no longer apply to a broad range of cross-border reporting activities, including reporting to foreign TRs pursuant to foreign reporting requirements.²⁵ In addition, as noted below, Switzerland will have in place an equivalence framework similar to that of the EU.

Equivalence. In the EU and Switzerland, a domestic authority can determine that foreign reporting requirements are equivalent to domestic requirements. Once such an equivalence decision is made, reports that are allowed to be made pursuant to the equivalent foreign requirements would be deemed to satisfy domestic reporting requirements. Because domestic reporting requirements in the EU and Switzerland supersede barriers in other laws, legal barriers that may normally apply to reporting pursuant to foreign requirements would not apply so long as such equivalent foreign reporting is permitted. In the EU, it would mean that national barriers to the reporting pursuant to foreign requirements would be superseded as soon as the European Commission has adopted an equivalent decision according to Article 13(1) and (3) of EMIR. Equivalent foreign reporting is permitted if at least one of the counterparties to the trade is established in the foreign jurisdiction. In addition, in the EU if the report is made to a foreign TR rather than to an EU TR, equivalent foreign reporting is permitted only if the foreign TR has been recognised to receive reports pursuant to EU requirements (which recognition itself requires negotiation of an international agreement and a cooperation agreement with relevant foreign authorities). In Switzerland, the Swiss Financial Market Supervisory Authority (FINMA) will be authorised to recognise a foreign reporting requirement as being equivalent to Swiss reporting requirements, and to recognise a foreign TR being reported to as being subject to adequate regulation and supervision in the foreign jurisdiction. Where such equivalence recognition decisions have been made, this would mean that requirements to obtain counterparty consent would generally be overridden.²⁶ Where an equivalence recognition decision has not been reached, it will remain the case that in some instances counterparty consent may be required before reporting pursuant to foreign reporting requirements.

²⁵ From 1 January 2016, the Swiss Financial Market Supervisory Authority (FINMA) will have the authority, subject to certain conditions, to exercise a right to consent before a Swiss prudentially regulated entity makes a disclosure of information extracted from a document pertaining to FINMA's supervision of this entity. Switzerland notes that this consent right will not be applicable to a Swiss prudentially regulated entity reporting to a trade repository in compliance with a foreign jurisdiction's trade reporting requirements.

²⁶ In certain instances, counterparty consent may still be required if the foreign regime were to require the reporting of information that the Swiss regime does not require and where such information would qualify as personal data pursuant to Swiss law.

Other conditions. Saudi Arabia reported that it requires bilateral agreements to be in place with foreign jurisdictions where such foreign TRs are located and mandatory approval from the Saudi Arabian Monetary Authority (SAMA).

See Table 7 in Appendix E for more information.

Finding 4. In the case of market participants' voluntary reporting to TRs or TR-like entities, barriers are widespread and in most cases are similar to barriers applicable to reporting pursuant to foreign requirements. In some cases such barriers can be overcome through obtaining counterparty consent or receiving authority authorisation.

A significant number of jurisdictions, including Australia, Brazil, Canada (Québec), France, India, Italy, Netherlands, Saudi Arabia, Singapore, South Africa, Spain, Switzerland, Turkey and the United Kingdom, either reported that some form of counterparty consent would be required in some cases to report voluntarily or suggested that such consent may be required. Saudi Arabia does not permit voluntary reporting. These requirements generally applied, without regard to whether the reports are made to a domestic or foreign TR or TR-like entity, the reports concern domestic or foreign counterparties, or the reports are submitted by domestic or foreign trade participants. In Saudi Arabia, the relevant authority's consent is required for voluntary reporting.

Finding 5. Masking of counterparty identifying information occurs in only a small number of jurisdictions.

A few jurisdictions reported that they permit or accommodate masking of the identifying information of a transaction party (Australia, Canada, Hong Kong, Singapore and the US (CFTC)). For example, in the US (for the CFTC only), although masking is not permitted under the CFTC's reporting requirements, pursuant to the CFTC's time-limited no-action relief, no enforcement action will be taken by the CFTC for a failure to report certain identifying information for enumerated jurisdictions. In addition, South Africa indicated that it is considering whether to permit masking.

In those jurisdictions where masking occurs, counterparties that have an obligation to report under a domestic reporting regime do not report certain TR data fields, such as information about the identity of the other side of the trade. In the jurisdictions where masking occurs, the justification of the masking is related to the alleged existence of legal barriers to reporting. However, some jurisdictions have mainly relied on the declarations of the counterparties in this respect, without always performing their own assessment of whether or not these alleged barriers do exist or can be overcome. In addition, not all the jurisdictions that permit or accommodate masking have a clear list of countries for which masking is allowed. Masking is seen as a temporary relief of counterparties' reporting obligation as long as the alleged legal barriers are in place. Relief has been made available through a no-action letter (e.g. in the US regarding the CFTC), discretionary relief (Canada), or class exemption (Australia). In order to permit or accommodate masking, jurisdictions do not usually make a formal derogation in the domestic reporting legislation.

See Table 8 in Appendix E for more information.

Finding 6. Certain jurisdictions are considering measures for eliminating any legal barriers to reporting that have been identified.

China, Korea, Mexico, Singapore and Turkey reported that they are currently either drafting their trade reporting legislation or reviewing whether to amend their laws to remove possible barriers; however, following further discussions or feedback received from these jurisdictions, no specific timeframes were given.

Recommendations

- 2A.** Where barriers to full reporting of trade information (including counterparty information) exist within a jurisdiction’s legal and regulatory framework, such barriers should be removed by June 2018 at the latest, with respect to reporting pursuant to domestic and foreign requirements.²⁷
- 2B.** Where there is a requirement in a jurisdiction’s legal and regulatory framework that a trade participant must obtain a counterparty’s consent to report trade data, by June 2018 at the latest all jurisdictions should permit transaction counterparties to provide standing consent to the reporting of such data to any domestic or foreign TR.
- 2C.** Masking of newly reported transactions should be discontinued by end-2018 once barriers to reporting are removed, since masking prevents comprehensive reporting.

By June 2016 jurisdictions should report what actions are planned to address these barriers to reporting trade information.

4. Authorities’ Access to TR Data²⁸

The peer review team has sought to identify the existence of any barriers to authorities’ access to data held in a TR.

In particular, cross-border access by authorities is important for making full use of TR data for two reasons. First, cross-border access enables authorities to reduce the regulatory burden on market participants. Authorities that can rely, at least in part, on foreign TRs can minimise the need for market participants to connect to multiple TRs or to report the same transaction to multiple TRs. In addition, the OTC derivatives market is highly international and

²⁷ In some jurisdictions there are restrictions or prohibitions on the use of certain types of counterparty identifying information, particularly in relation to natural persons (for instance, national identity numbers or social security numbers), that may affect the information that can legally be included in transaction reports. In such cases, jurisdictions should ensure other counterparty identifying information is able to be included in transaction reports made pursuant to domestic and foreign reporting requirements so as to prevent counterparty anonymity.

²⁸ This section addresses the second aspect of the second peer review objective listed in Section 1.5: to identify legal barriers in national laws and regulations (such as data privacy laws, secrecy laws, blocking statutes or other laws) that may limit authorities’ domestic and cross-border access to OTC derivatives data in TRs. It also addresses the third peer review objective listed in Section 1.5.

interconnected, meaning transactions in one jurisdiction can have important implications for other jurisdictions. Some authorities see the need to access – possibly anonymised – data on transactions in products with domestic underliers or other off-shore transactions that have implications for the domestic market.²⁹

The peer review team considered four types of authorities that can access TR data, as well as the kind of data that is accessible to that authority.

- There is the authority with the primary responsibility for regulating the TR, where that TR is receiving data pursuant to the laws or rules of that authority’s jurisdiction. Such authority is referred to here as the “primary authority”. The data collected by the TR pursuant to the laws or rules of that authority’s jurisdiction is referred to as the “domestic TR data.”
- The peer review team also considered access to TR data by an authority from the same jurisdiction as the primary authority but that is not the regulator of the TR (i.e. not the primary authority). Such authority is referred to here as a “domestic authority.” For example, a domestic authority may be the prudential regulator whereas the market regulator is the primary authority of the TR located in a given jurisdiction.
- The peer review team also noted the possibility that a primary authority may register, recognise or authorise TRs located in a foreign jurisdiction to collect domestic TR data. Therefore in such a case, there would be more than one primary authority, and one or more of them may be located in a different jurisdiction than that of the TR.
 - As an illustration of this case, the peer review team considered the situation of Canada. All TRs receiving Canadian domestic TR data are currently located outside of Canada. In this situation, the Canadian primary authority of the foreign-located TRs is one of the provincial securities regulators, such as the Ontario Securities Commission, and the Canadian domestic authority is one of the other Canadian authorities, such as the Bank of Canada. In addition, these TRs have another primary authority, as well as other domestic authorities in the jurisdiction where these TRs are located.
- Finally, another type of authority is an authority outside of the TR’s jurisdiction that is not a primary authority or domestic authority as defined above and is seeking to access TR data. Such authority is referred to here as a “foreign authority.”

A framework for domestic authorities’ access to TR data is in place in most jurisdictions. However, at this time, access to TR data by foreign authorities is not supported by effective legal frameworks and/or procedures in many jurisdictions.

Given that TR data typically includes confidential information, access to TR data is dependent on the existence of certain safeguards to protect the confidentiality of the TR data. Typically, safeguards are also in place to ensure that TR data is accessed by authorities in accordance to

²⁹ This peer review report is not intended to be read as contradicting or revising any recommendations contained in the CPMI–IOSCO 2013 report on authorities’ access to TR data. The peer review focused solely on the legal barriers and access currently available to authorities.

their respective mandates. Such controls are generally not considered barriers to authorities' data access.

Authorities' access to TR data can be direct or indirect. Direct access allows a continuous access to data directly stored in the TR without further involvement of the primary authority. Indirect access is based on *ad hoc* requests or other negotiated level of exchange of TR data through the primary authority.

See Table 9 in Appendix E for more information.

4.1 Assessment of legal barriers to authorities' access to TR data

Finding 7. While in most cases there are no barriers to domestic authorities' access to TR data reported under domestic rules, in a small number of jurisdictions only the authority with primary responsibility for regulating the TR has access.

Authorities other than the TR's primary authority may require access to relevant data held at TRs designated for reporting under domestic rules. The CPMI–IOSCO 2013 report on authorities' access details the scope of such access and makes clear that direct access to TR data is preferred over indirect access.

While in most cases there are no barriers to domestic authorities' access (direct or indirect) to domestic TR data, in a small number of jurisdictions only the primary authority has access.

In India, only the Reserve Bank of India, which is the primary authority, is legally allowed to access the domestic TR data. Other Indian authorities such as the Securities and Exchange Board of India, the Forward Markets Commission and Financial Stability Development Council, which are domestic authorities, are not legally allowed to access the domestic TR data.

In China, only the People's Bank of China, which is the primary authority, has access to domestic TR data, and there is no clear framework for the access by other domestic authorities to non-aggregated TR data. The access by domestic authorities would require a case-by-case assessment on the basis of an official request from these authorities to the People's Bank of China.

In the US, in most instances, federal law and CFTC regulations currently require domestic authorities to enter into a confidentiality agreement and agree to indemnify the TR's US primary authority and the TR in order to directly access data from a CFTC-registered TR. Specifically, US domestic authorities are subject to these requirements and, in the absence of such indemnification and confidentiality agreement, do not have direct access to US domestic TR data. Subject to statutory confidentiality requirements, US domestic authorities may receive US domestic TR data reported to a CFTC-registered TR from the CFTC (i.e. indirect access), without executing an indemnification agreement but still pursuant to an access agreement or MoU.³⁰ At this stage, no domestic authority has access to US domestic TR data.

³⁰ For US SEC-registered TRs (of which there are none currently), the SEC has proposed certain exemptive relief from the indemnification requirements that, if finalised, would allow direct access to data held in SEC-registered TRs for certain

In Canada, market participants report under Canadian rules to US-located TRs registered with the CFTC. The Canadian primary authorities for US TRs, such as the Ontario Securities Commission, have direct access to Canadian domestic TR data held in a US TR that has been registered with that Canadian primary authority as well as registered with the CFTC, without needing to indemnify the TR and the CFTC.³¹ Canadian domestic authorities other than the Canadian primary authorities (such as the Bank of Canada and the Office of the Superintendent of Financial Institutions) requesting direct access to Canadian domestic TR data held in a CFTC-registered US TR are subject to the indemnification requirement. These domestic authorities may, however, be able to obtain the data indirectly through the Canadian primary authorities pursuant to a MoU and without indemnification, but this has not been tested.

In Hong Kong, Japan, Korea, Mexico³² and Saudi Arabia, access by domestic authorities is subject to a MoU or other coordination mechanism with the primary authority. In these jurisdictions, access is primarily indirect through requests to the primary authority, but it can also be direct (e.g. in the case of Hong Kong³³). In practice, requests for access by other domestic authorities have been infrequent.

In Argentina, Australia, Brazil, EU member states, Indonesia, Russia, Singapore and Switzerland (from 1 January 2016), access is in principle allowed for some domestic authorities other than the primary authority, without a MoU or other legal documentation. In these jurisdictions, the access is direct (e.g. Australia, EU member states, Switzerland) or indirect depending on the framework of each jurisdiction. In some of these jurisdictions, the access issue is facilitated by the fact that the primary authority is an integrated authority (e.g. its regulatory mandate covers both market and prudential regulatory responsibilities), which can access domestic TR data according to its different mandates.

Singapore also has a TR located in its territory, which is licensed by the Monetary Authority of Singapore (MAS) and the Australian Securities and Investments Commission (ASIC). Direct access by ASIC, as the TR's primary authority in Australia, and the Reserve Bank of Australia (RBA), as an Australian domestic authority, is permitted pursuant to the execution of MoUs between the MAS and ASIC and between MAS and RBA.

Two jurisdictions (South Africa and Turkey) are considering the issue.

domestic (and foreign) authorities if certain criteria are met. There is not yet any contemplated date for the finalisation of this exemptive relief.

³¹ See the CFTC's interpretive guidance, *Swap Data Repositories: Interpretative Statement Regarding the Confidentiality and Indemnification Provisions of the Commodity Exchange Act*, 77 FR 65177 (Oct. 25, 2012).

³² Access to data held by central counterparties (CCPs) or TR-like entities is direct by primary authorities without the need of a MoU; for access by authorities different from the primary authorities said access is indirect and in terms of the MoU signed with the primary authorities.

³³ In Hong Kong, the HK Securities and Futures Commission, being the joint administrator of the new regime with the Hong Kong Monetary Authority, has direct access to TR data without the need for a MoU, unlike other potential domestic authorities.

Finding 8. Foreign authorities' direct access to TR data is generally quite limited; only a small number of jurisdictions have effective frameworks in place to facilitate direct access, and there are only a few examples where such access arrangements have been established.

In addition to access to data held at domestic TRs, foreign authorities also may require access to data (other than domestic TR data) held at TRs in other jurisdictions. This access may depend on the execution of a MoU or other legal documentation between the authorities. The CPMI–IOSCO 2013 report on authorities' access to TR data details the scope of such access.

Foreign authorities' direct access to such TR data is quite limited because: (i) there is an absence of a legal framework in most jurisdictions to allow for such direct access; or (ii) in some countries that do have a legal framework to allow for direct access, the conditions for direct access may be difficult to meet. In other jurisdictions that have a legal framework to allow for direct access, the conditions for direct access may not be difficult to satisfy (for instance, only requiring execution of a MoU between the primary authority and the foreign authority).

Ten jurisdictions do not have (and have not indicated a specific plan to have) a framework in place for allowing direct access by foreign authorities to TR data: Brazil, China, India, Indonesia, Japan, Korea, Mexico, Russia, Saudi Arabia and Turkey.

Only Argentina, Australia, Canada, the EU, Hong Kong, Singapore and the US have a framework in place for allowing direct access by foreign authorities to TR data; in addition, Switzerland will have such a framework in place as of 2016.

In Argentina, foreign authorities' direct access to information held in TR-like entities would be possible after conclusion of a MoU with the Comisión Nacional de Valores.

In Australia, the right of directly accessing TR data reported under the Australian regime is granted to a foreign authority once this authority has been "prescribed" on the basis of the written representations given to the Australian authorities, for example, regarding confidentiality of the TR data.

In Canada, direct access to a TR is possible after conclusion of a MoU, although direct access to Canadian TRs located in the US is subject to the US indemnification requirements described below.

Under EU law, for non-EU jurisdictions where there is no TR established, direct access to EU TR data can be granted to a foreign authority following the conclusion with ESMA of a MoU in accordance with the recommendations of the CPMI–IOSCO 2013 report on authorities' access to TR data. At this time, ESMA has entered into MoUs with the Australian authorities ASIC and RBA. Pursuant to these MoUs, the Australian authorities are legally allowed to directly access the data reported under the EU regime to EU TRs. Under EU law, where a TR is established in the jurisdiction of the foreign authority, direct access to EU TR data is granted only after the execution of both an International Agreement and a MoU. Some of the US authorities reported that they may face difficulty in entering into the necessary International Agreement because the International Agreement would be considered a treaty under US law and may require US authorities to seek treaty-making authority. The EU has not yet entered into an International Agreement with any foreign authority that has a TR established in its jurisdiction.

In Hong Kong, foreign authorities will be able to have direct access once they have signed a MoU and will likely have web accounts on HKTR's web portal.

In Singapore, direct access can be granted to a foreign authority upon execution of a data access MoU.

South Africa is still considering whether foreign authorities will have direct or indirect access following the conclusion of a MoU. South Africa also indicated that it is still to be determined if there would be some indemnification provisions.

In Switzerland, under its new law which goes into effect on 1 January 2016, foreign authorities will have direct access to TR data after conclusion of a MoU.

In the US, similar to what was already explained for the domestic authorities' access to domestic TR data (see above), US federal law allows an appropriate foreign regulator to have direct access to data reported pursuant to the US regulatory regime to the US-registered TR, but would require that regulator to enter into a confidentiality agreement and agree to indemnify the TR's US primary regulator and the TR. A number of authorities reported that they would face great difficulty in meeting this condition, and no foreign authority currently has access to data reported pursuant to the US regulatory regime to US-registered TRs.³⁴

Finding 9. Foreign authorities' indirect access to TR data is theoretically possible in many jurisdictions' regulatory frameworks, though with varying degrees of conditionality and no effective example yet.

Though the CPMI-IOSCO 2013 report on authorities' access makes clear that direct access is preferred over indirect access to TR data, legal barriers to direct access make indirect access at present the only legally available option for foreign authorities to obtain relevant data from TRs in some jurisdictions.

Indirect access would enable a foreign authority to access data in a TR with the intermediation of the TR's primary authority. This indirect access may depend on the conclusion of legal documentation, such as a MoU between the authorities. Once the legal right of access has been granted to the foreign authority, the manner of access, and how the foreign authority can make a request for TR data, will be governed by the terms of the MoU.

The possibility of indirect access is offered to foreign authorities in jurisdictions where there is no framework for direct access or where some of the conditions of the direct access cannot be met. Argentina, Brazil, EU, Indonesia, Japan, Korea, Mexico, Russia and Saudi Arabia indicate that indirect access could be granted to foreign authorities following the execution of a MoU.

Nevertheless, these jurisdictions highlighted that indirect access is not yet effective because no request for such access has been received from foreign authorities. No specific TR MoU allowing foreign authorities' access has yet been concluded. Only the EU indicated that there is on-going negotiation of a MoU to allow indirect access by a foreign authority.

³⁴ See Footnote 30 for further detail relevant to US SEC-registered TRs.

Regarding the types of MoUs that would allow foreign authorities' access, jurisdictions seem to be relatively flexible.

In the case of bilateral MoUs, authorities mentioned either the possibility to conclude MoUs which would be specific to TR data, or if needed review and update existing MoUs to broaden their scope to include TR data. A number of authorities also indicated that in practice, they would favour reciprocal MoUs even though it might not always be a legal requirement in their jurisdictions.³⁵

A number of market regulators noted that they are signatories of the IOSCO Multilateral Memorandum of Understanding Concerning Consultation and Cooperation and the Exchange of Information (MMoU), which provides certain market regulators with a mechanism to consult, cooperate and exchange information, for regulatory enforcement, among them. The exchange of information regarding TR data could take place to a certain extent on an *ad hoc* basis via the IOSCO MMoU. However, the IOSCO MMoU is not specific to TR data, it covers only IOSCO-member authorities, and it would only be applicable when signatory authorities are in the process of investigating offences related to securities or derivatives. It does therefore not cover all the type of data needs and uses that are possible with TR data (e.g. monitoring of systemic risk).

The Canadian authorities indicated that indirect access by foreign authorities to Canadian TR data would be subject to the conclusion of a MoU with the Canadian authorities.

With respect to indirect access, the US indicated that, subject to statutory confidentiality restrictions, a foreign authority could receive confidential TR data from the CFTC without the execution of a confidentiality and indemnification agreement with a CFTC-registered TR (as opposed to directly from the TR).

In a few jurisdictions, foreign authorities' indirect access is not allowed or is subject to very significant or challenging conditions.

China indicated that there is currently no legal basis (and no plan) for providing indirect access to foreign authorities.

India indicated that in the case of a MoU, the express written consent of participants should be obtained before sharing information with foreign authorities.

South Africa and Turkey are still considering whether and under which conditions foreign authorities could get indirect access to TR data.

Recommendations

3A. By June 2018 at the latest all jurisdictions should have a legal framework in place to permit access to data held in a domestic TR by domestic authorities and by foreign

³⁵ For instance, Indonesia notes that a MoU that accommodates reciprocity principles and equal benefits of information sharing will be required, similar to MoUs agreed between other authorities.

authorities, on the basis of these authorities' mandates and in accordance with the domestic regulatory regime.³⁶

- The legal framework should include eliminating the conditions that, in practice, prevent this access.³⁷
- In general, consistent with the recommendations of the CPMI–IOSCO 2013 report on authorities' access to TR-held data, it is preferable that access to relevant data held in TRs be direct rather than indirect access, to enable authorities to have continuous and un-intermediated access to relevant TR-held data.³⁸

3B. All relevant authorities should coordinate in establishing cooperative arrangements that facilitate authorities' access to TR-held data (whether it be through direct or indirect access).³⁷

By June 2016 jurisdictions should report what actions are planned to permit and support authorities' access to data held in a domestic TR.

4.2 Operational and technical issues in authorities' access

TRs generally provide data to authorities through a *regulatory portal* (essentially a password-protected website) and through batch delivery on a secure FTP site. The portal may include pre-constructed reports and possibly an interface to query the TR for specific sub-sets of (possibly aggregated) data. Batch delivery may include reports and raw transaction data. There is little evidence of the development of application programming interfaces to allow direct interaction between authorities' systems and the TR database.

Finding 10. Significant investments may be necessary to overcome the challenges of data fragmentation and to transform TR-held data into useful information.

With trade reporting requirements in effect in a growing number of jurisdictions, a considerable amount of data is being collected, albeit with a multiplicity of jurisdictional

³⁶ For more details on the level of data access in the relation to the authorities' functional mandates, please refer to CPMI–IOSCO (2013), *Authorities' access to trade repository data*, August; available at: <http://www.bis.org/cpmi/publ/d110.htm> and <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD417.pdf>.

³⁷ Legal frameworks, processes and procedures, and any TR-related cooperative arrangements for authorities' access should be consistent with the recommendations of the CPMI–IOSCO 2013 report on authorities' access, and consistent with Responsibility E of the CPMI–IOSCO Principles for Financial Market Infrastructures which states: "Central banks, market regulators, and other relevant authorities should cooperate with each other, both domestically and internationally, as appropriate, in promoting the safety and efficiency of FMIs." Within this Responsibility, key consideration 8 states: "Relevant authorities should coordinate to ensure timely access to trade data recorded in a TR." See CPMI–IOSCO (2012), *Principles for financial market infrastructures*, April, pp.133–137; available at: <http://www.bis.org/cpmi/publ/d101a.pdf> and <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD377-PFMI.pdf>.

³⁸ See pp.23–24 of the CPMI–IOSCO 2013 report on authorities' access to trade repository data: "In instances where direct access by an authority is blocked because of legal constraints on direct access, the legal framework may provide for indirect access via another authority, which will typically be a TR supervisor or another authority having direct access to the data. In such circumstances, indirect access may be a second best solution to address these situations, but it should be viewed as the exception, not the norm."

approaches. More progress is needed to be able to improve the usability of this data. Some authorities report operational and technical challenges in receiving and managing data obtained from TRs. One reason for this is the large number of TRs operating in some jurisdictions. As noted in Section 1.3, as at end-September 2015 there were 20 TRs in operation, as well as several TR-like entities. Table 1 in Appendix B gives more details of these entities and the jurisdictions in which they operate. Since each TR can define its own data and connection formats and require specific account setups and legal documentation, the setup work required by authorities increases with the number of TRs they need to consult. The insufficient harmonisation of reported data discussed in Section 5 also implies that authorities must be able to understand and deal with different data definitions in some cases.

A second source of operational and technical issues is that the kind of detailed and voluminous data created by TRs is new to many authorities, who are in the process of developing the skills and tools needed to process and understand the data. Some jurisdictions report that they are waiting on improvements in data reporting and data quality before fully committing to this work. But there is also good work happening in many jurisdictions and authorities are collaborating to share knowledge and best practices through groups such as the OTC Derivatives Regulators Forum.

Data fragmentation may also affect authorities' ability to provide indirect access to data to other authorities. For indirect access to be possible, primary authorities may need to act as data providers or managers for other authorities. The CPMI-IOSCO 2013 report on authorities' access and the FSB's 2014 Aggregation Feasibility Study give details on the kinds of requirements that primary authorities would need to fulfil.

Many important uses of data by authorities require that data be aggregated in some way. This could include, for example, combining data from several TRs (possibly including foreign TRs), removing duplicate transactions, and calculating totals by product, participant, or counterparty-pair. In some cases, individual TRs can perform certain types of aggregation and deliver the aggregated data to authorities, but in most cases, individual authorities need to do their own aggregation based on raw data.

The FSB's 2014 Aggregation Feasibility Study discusses several options for performing global data aggregation. The report finds that a physically or logically centralised aggregation mechanism is preferable to the current situation where individual authorities do their own data aggregation.

Recommendation

- 3C.** Authorities and TRs should work together, as appropriate, to facilitate the creation of appropriate operational frameworks that facilitate access to TR-held data, whether direct or indirect.

By June 2016 jurisdictions should report what actions are planned to permit and support authorities' access to data held in a domestic TR.

5. Data Quality³⁹

The peer review team has also sought to understand what technical obstacles might be reducing the effectiveness of trade reporting. The team has therefore explored with jurisdictions and TRs issues of data quality, though has been careful to avoid where possible any duplication of other international workstreams underway, such as the CPMI–IOSCO working group on data harmonisation.

Finding 11. Inadequacies in data standards, both nationally and internationally, have inhibited the implementation of quality controls and reduced the quality of data reported to TRs.

In reporting transactions to a TR, there are a number of different fields and sets of information reported by firms. As jurisdictions have implemented their own requirements for trade reporting, they have varied in their approach to require standardisation in fields and submissions. In some cases, there are not requirements for standardised reporting of information (e.g. date fields could be reported in different ways), and in addition, to the extent that there are requirements for standardised reporting, these requirements may vary within or across jurisdictions. Data standards are particularly important because they ensure the data reported to TRs is provided in a similar manner across reporting entities; this offers better analysis on transaction records. Due to the lack of data standards within or across jurisdictions, there are a number of issues with the data quality, including:

- incomplete, incorrect or empty data fields;
- inconsistent data formatting; and
- inability to validate fields.

In particular, each issue can affect reporting and analysis in many ways. For the issue of incomplete, incorrect, or empty data fields, it becomes difficult to reconcile transactions, particularly where two-sided reporting is required. At times, there is a lack of clarity on whether inputs for specific fields are mandatory or optional, which results in confusion for market participants and TRs. Additionally, without guidance or data standards, TRs or market participants are often unable to perform more complex validation on the data reported to ensure that it is correct.

Most TRs are currently performing only the most basic validity checks on submitted data and are awaiting further input from authorities before imposing stricter checks. The infrastructure that most TRs have built for these validations is automated; however the processes may not be consistent amongst the TRs. There are two levels of data quality validation that have been implemented by, and consistent amongst most TRs: (1) the technical level validation which consist of format and field size check; and (2) the business level validation where fields

³⁹ This and following sections address the third and fourth of the peer review objective listed in Section 1.5: to identify the main other challenges that national authorities may face in achieving comprehensive reporting to TRs of a type that meets the G20 goals (i.e. to improve transparency in OTC derivatives markets, mitigate systemic risk, and protect against market abuse); and to highlight good practices and lessons learned from experience to date, where appropriate, and to make recommendations to address the identified barriers and challenges in the practical implementation of effective reporting to TRs.

subject to holidays, date sequencing, etc. are checked. However when there are errors, it is often unclear what steps, if any, TRs are expected to take, because there may be no defined parameters for incomplete data submissions or some fields are not deemed mandatory for reporting purposes. Even where valid data is reported, lack of harmonisation becomes an impediment for reporting across TRs and jurisdictions. Validation along with standard definitions will improve data quality and usability.

Finding 12. Currently, the lack of consistent, harmonised trade and product identifiers and uneven use of the global Legal Entity Identifier, as well as access limitations, makes it difficult for many authorities to accurately aggregate and analyse data, even within some jurisdictions, and especially on a cross-border basis.

A comparison of the OTC derivatives amounts collected by TRs and jurisdictions with aggregate OTC derivatives statistics points to the likely existence of double-counting. The lack of standards for identifiers can exacerbate issues in reconciling trades, which results in trades often being counted multiple times. Multiple counting is caused by many problems, including: (i) failure to match reports where two-sided reporting is mandated; (ii) multiple non-matched reports from cleared trades; (iii) uncertainty about who has the reporting obligation (trading venue, central counterparty (CCP), dealer, broker, etc.); and (iv) requirements to report in more than one jurisdiction.

See Table 10 in Appendix F for further detail.

In addition to difficulties in aggregating data, those jurisdictions that are relatively advanced in their data collection efforts in some cases report problems in providing basic measures such as turnover and breakdowns of the proportion of centrally cleared trades to non-centrally cleared trades or of domestic versus foreign currency derivatives. Also, a variety of approaches to computing turnover measures was observed in jurisdictions' responses to the peer review questionnaire. It should therefore be considered whether additional international guidance on approaches to computing turnover measures and other aggregated data might be needed following the work on harmonisation of data elements in order to make these measures more comparable across jurisdictions.

See Table 11 in Appendix F for further detail.

Difficulty in aggregating data and reporting on the size of the market is also hampered by the lack of direct access or multiple kinds of ways and methods (i.e. web portal or manual report) in which TRs and TR-like entities are making data available to authorities.

Finding 13. The most progress is being made to improve data quality where market participants, TRs and authorities jointly take responsibility for creating and reporting high-quality data and where international authorities are coordinating.

Useful data for authorities and the public can only be created where data quality is an end-to-end priority. Progress has been made where authorities have implemented a process for feedback and close interaction between authorities and TRs. This includes authorities in the EU and the US, as well as Australia, Brazil, Hong Kong and Singapore. Changes to market

participant's reporting systems, TR infrastructure and authorities' rules and guidance take considerable time and are costly. But both authorities and TRs must be prepared to make these changes as each gains experience in how to create high quality, useful data.

A number of initiatives underway will help to support improved data quality, including:

- the global legal entity identifier initiative;
- CPMI–IOSCO OTC derivatives data harmonisation initiative;
- validation of data fields; and
- implementation of data standards by individual jurisdictions.

In terms of work taking place at the jurisdictional level, several have undertaken initiatives to validate the data collected in conjunction with their registered or authorised TRs, ranging in scope and complexity. Two jurisdictions (EU and Hong Kong) have undertaken a two part validation initiative, the first focused on identifying fields that can appropriately be left blank and the second, a more complex validation initiative to verify appropriate format and content for specific fields including identifying logical dependencies between fields.

Another jurisdiction (US) has undertaken an initiative to standardise key data elements, including identifying when a field may be used and providing detailed descriptions of data fields.

One jurisdiction (Mexico) has implemented a four stage validation process with its TRs, while another (Australia) has conducted an analysis on the trades that are over-reported to its TRs to build a more robust data analysis system. Several jurisdictions are considering system improvements for matching two-sided transactions (Russia, Hong Kong), including reducing the number of fields required. Most jurisdictions have in place ongoing formal or informal discussions with the authorities and the TRs in order to identify, analyse or work to resolve reporting issues. Finally, at least one jurisdiction (Brazil) leverages a centralised reporting infrastructure which contains the legal form of the transaction to populate its trade repository data, ensuring a single, correct trade report.

However, further efforts also need to be made to improve data quality at the source. Most of the current efforts are geared towards ensuring that the TRs are able to apply high quality validation thus accepting quality data. However, TRs alone cannot create good quality data. Quality of reported data is highest when the primary sources of such data, i.e. reporting parties for the trade, provide correct and definitive reports with the TRs. Further work needs to be undertaken to direct guidance to reporting parties through both the publication of appropriate technical guidance and communication both directly and through industry associations.

Recommendations

- 4A.** Authorities, TRs and market participants should work together to improve TR data quality, including to facilitate improvements in data validation processes.
- 4B.** Since universal global identifiers (such as LEI, UPI, UTI) and harmonised data standards are expected to improve data quality in TRs, jurisdictions are strongly

encouraged to support the development and adoption of such identifiers and data standards and should look to international guidance in this area.

6. Public Disclosure of TR Data

Finding 14. Some jurisdictions require TRs to publicly disseminate anonymised transaction-level data. Public disclosure of aggregate-level data is also required in many jurisdictions. Some jurisdictions do not currently have any public disclosure requirements.

One way in which TR data can be put to effective use is in improving public transparency in OTC derivatives markets. As noted in Section 1.4, CPMI and IOSCO have published reports that discuss this use of TR data.

In a practical way, TRs are directly involved in the disclosure of data to the general public. The vast majority of them publish the data via a dedicated section of their websites, under the format and frequencies required by the national jurisdictions under which they operate. Some jurisdictions are still determining their requirements and/or plan to extend public disclosure of data; in some cases this might at least in part be through trading platform requirements rather than through TRs. TR disclosure requirements may be for aggregate-level data and/or transaction-level data; these differ greatly from one another and serve different purposes. Some TRs also disclose certain aggregate-level data on a voluntary basis.

In Canada and the US, post-trade transparency – i.e. the public dissemination of transaction-level data – for at least some OTC derivatives is being implemented through TRs. In the EU, post-trade transparency will be provided through trading platforms, which were not surveyed by the review team.

Many jurisdictions also require TR-held data to be disclosed in an aggregated format. The most common required reporting frequencies for aggregated data are weekly or monthly. However, some jurisdictions only ask for quarterly (Japan, Korea) or even yearly (Turkey) disclosure of aggregate-level data.

Indonesia, Russia and Saudi Arabia have no requirements for public disclosure of TR data. Hong Kong and Singapore do not have mandatory requirements for public disclosure of data, but are considering adopting some of these requirements.

Table 12 in Appendix G illustrates the current status of requirements for public disclosure of TR-held data, according to different jurisdictions.

7. Current Use of Data by Authorities

Finding 15. Notwithstanding the issues noted above regarding access and quality, several authorities are already making good use of TR data for certain purposes.

Despite the many challenges encountered in achieving comprehensive, high-quality reporting, and the large amount of work left to do on standardisation and harmonisation of data, authorities are already making use of TR data within jurisdictions to improve transparency, mitigate systemic risk and protect against market abuse. At this early stage, authorities in many jurisdictions are focusing on using the data to improve the quality and comprehensiveness of reporting. This includes assessing the extent to which market participants subject to mandatory reporting are complying with the rules that require reporting to TRs. It also includes analysing the type of data being reported to determine where additional rules, standards or quality control measures are necessary to make the data more usable.

Authorities are also using the data to assist in the implementation of other OTC derivatives market reforms. For example, many jurisdictions are using TR data to help identify the extent to which OTC derivatives trades are being centrally cleared. They also analyse the characteristics of different OTC derivatives products to help determine whether they should be subject to mandatory clearing rules. For example, authorities assess the degree of product standardisation and calculate measures of market liquidity as well as the number and types of participants in different OTC derivatives product markets.

For the purpose of assessing financial stability and identifying the build-up of systemic risk, TR data can be important both for simple analysis and complex modelling. At the most basic level, determining the size and participation in various market segments is allowing authorities to better understand where risks may potentially build up. More sophisticated analysis requires an understanding of the positions of market participants and the network of exposures between them. This kind of analysis is not yet possible using data from recently implemented TRs due to data quality issues. But in cases where authorities have had more experience working with TRs, more sophisticated analysis has been possible. This includes users of the voluntarily-reported data in the DTCC Trade Information Warehouse and users in jurisdictions that have older mandatory reporting rules. The following Box gives examples of how authorities are making use of TR data.

Recommendation

- 4C. Authorities should continue to share knowledge and best practices on how to effectively access, process and interpret TR data.

Box: Illustration of TR data use by authorities

A domestic authority in one jurisdiction reports having used the data for policy purposes on a limited basis and being in the process of developing a range of projects using the data. For example, the following reports are under development:

- **Position report:** Provides aggregate statistics on all the outstanding trades in the interest rate derivatives market, at a given point in time, broadly segmented into different product and currency combinations. For the given combinations the report highlights the volume of trades (gross notional and number of trades), market structure (market share of largest participant, Herfindahl-Hirschman index) and percentage of cleared contracts. In the absence of a UPI, the existence of certain products such as ‘Basis swap’ and ‘OIS’ must be inferred.
- **Activity report:** Used to monitor the activity in the interest rate derivatives markets for any given time period (day/week). It shows the total number of executed trades, gross notional activity and number of market participants for various product and currency combinations. This is then used to examine the change in market activity over time.
- **Swap curves and liquidity measures:** The prices available in the TR data are used to construct swap curves for different products (e.g. plain vanilla swaps, OIS swaps). The distribution of prices for a given tenor, product and currency combination can be examined to get a better idea of liquidity in the market. Different liquidity metrics can also be constructed using the price information in the TR data.
- **Net notional holding in CDS contracts:** By making use of the directional information of the CDS contracts, institutions that are net sellers for a particular underlying can be identified and also their corresponding buyers. This information can then be used to map the network of exposures in the CDS market.

A primary authority in a different jurisdiction uses both transaction- and aggregate-level information to identify market flows and outstanding amounts. Using information that is transmitted to this authority on a daily basis, market data is continually used for both micro- and macroprudential purposes. Since this authority has access to detailed counterparty information, financial system interconnectedness is able to be monitored, with estimates developed for contagion paths for financial and non-financial institutions.

In addition, this authority uses periodic reports on derivatives markets as part of its supervision process, as well as specific studies. As an example, in the analysis of OTC swaps, the supervision team is able to identify outliers’ transactions, which are named ‘atypical OTC swaps’. The highly granular information available allows for the identification of, for instance, pairs of swaps operations with same counterparties, same rates and indicators, and same trading and closing dates, allowing for detailed supervisory investigations as necessary.

Appendix A: Mapping of trade reporting objectives and remaining challenges

Fundamental goals of trade reporting	Main progress / achievements	Challenges remaining
Improve market transparency	<ul style="list-style-type: none"> • Mandatory trade reporting to TRs is now effective in a number of G20 jurisdictions. • Several TRs have successfully been through the registration process in nearly all jurisdictions where mandatory trade reporting is effective. 	<ul style="list-style-type: none"> • Data quality is one the main challenges remaining in actually improving market transparency: <ul style="list-style-type: none"> ○ reliability of figures ○ problems of double-counting ○ data aggregation. • Progress remain to be made as to transforming <u>data</u> into actual <u>information</u>.
Mitigate systemic risk	<ul style="list-style-type: none"> • In the vast majority of jurisdictions, regulatory authorities have an effective access to data held in TRs in their respective jurisdictions, depending on their missions and functional mandates. • Progress has been made in the ability of regulators to examine systemic risk factors: <ul style="list-style-type: none"> ○ market size ○ market concentration ○ level of interconnectedness ○ market structure. • Successes in data harmonisation at the global level: example of the LEI. 	<ul style="list-style-type: none"> • Data fragmentation across TRs. • Important challenges remain in the field of data aggregation across different TRs, sometimes within a sole jurisdictions with multiple licensed TRs. • Efforts to improve data harmonisation should continue to be pursued: <ul style="list-style-type: none"> ○ unique transaction identifiers (UTI) ○ unique product identifiers (UPI) ○ other OTC derivatives data elements.
Protect against market abuse	<ul style="list-style-type: none"> • Supervision of market participants and their activity is being facilitated by trade reporting to TRs and global implementation of LEI. • Availability of TR data has enabled authorities to reduce opacity in OTC derivatives markets and to conduct more effective market surveillance, with market abuse actions more likely to be detected. 	<ul style="list-style-type: none"> • Need to include in LEI data (Level 2): hierarchical structures between legal entities of a same group. • Authorities should be able to aggregate data attributed to a group of related entities in order to detect possible instances of coordinated market abuse undertaken by the group.

Appendix B: Availability of TRs in FSB member jurisdictions

Table 1

Trade repositories in operation in FSB member jurisdictions

TRs and TR-like entities authorised and operating as at September 2015

TR name	Location	Jurisdictions in which TR is authorised to operate	CO	CR	EQ	FX	IR
TRs							
BM&F Bovespa	Brazil	Brazil					
BSDR LLC	US	(US)					
CCIL	India	India					
CETIP	Brazil	Brazil					
Chicago Mercantile Exchange Inc.	US	Canada, (US)					
CME European Trade Repository	UK	EU					
DTCC-DDR	US	[Australia], Canada, (US)					
DTCC Data Repository – Japan	Japan	[Australia], Japan					
DTCC-DDRL	UK	[Australia], EU					
DTCC Data Repository – Singapore	Singapore	Australia, Singapore					
HKMA-TR	Hong Kong	[Australia], HK					
ICE Trade Vault	US	Canada, (US)					
ICE Trade Vault Europe	UK	EU					
KDPW Trade Repository	Poland	EU					
Korea Exchange (KRX)	Korea	Korea					
CJSC National Settlement Depository (NSD)	Russia	Russia					
REGIS-TR	Luxembourg	EU					
OJSC “Saint-Petersburg Exchange” (SPBEX)	Russia	Russia					
SAMA TR	Saudi Arabia	Saudi Arabia					
UnaVista	UK	[Australia], EU					
Sub-total			15	17	16	18	19
TR-like entities							
Argentina Clearing	Argentina	Argentina					
Banco de México	Mexico	Mexico					
Bank of Korea	Korea	Korea					
Bank Indonesia	Indonesia	Indonesia					
CFETS	China	China					
China Securities Internet System	China	China					
Financial Supervisory Service	Korea	Korea					
Mercado de Valores de Buenos Aires	Argentina	Argentina					
Mercado Abierto Electrónico	Argentina	Argentina					
Mercado Argentino de Valores	Argentina	Argentina					
Mercado a Término de Buenos Aires	Argentina	Argentina					
Mercado a Término de Rosario	Argentina	Argentina					
SIOGRANOS	Argentina	Argentina					
Takasbank	Turkey	Turkey					
Sub-total			9	5	7	9	6
Total: TRs and TR-like entities			24	22	23	27	25

() indicates application pending / under consideration in indicated jurisdiction; [] indicates recognition/prescription in place for these TRs in Australia.

CO = commodity, CR = credit, EQ = equity, FX = foreign exchange, IR = interest rate

Sources: FSB member jurisdictions; various TRs.

Table 2
Trade Reporting Infrastructure Availability in FSB Member Jurisdictions

As at September 2015

Jurisdiction	Number of TRs authorised in jurisdiction	Number of TR-like entities available in jurisdiction	All asset classes covered
Argentina	0	7	Yes
Australia	1 ^(a)	N/A	Yes
Brazil	2	N/A	Yes
Canada	3	N/A	Yes
China	0	2	No
EU	France	N/A	Yes
	Germany		
	Italy		
	The Netherlands		
	Spain		
	UK		
Hong Kong	1	N/A	No
India	1	N/A	No
Indonesia	0	1	No
Japan	1	N/A	No
Korea	1	2	Yes
Mexico	0	1	No
Russia	2	N/A	Yes
Saudi Arabia	1	N/A	No
Singapore	1	N/A	Yes
South Africa	0	N/A	N/A
Switzerland	0	N/A	N/A
Turkey	0 ^(b)	1	No
US	4	N/A	Yes

(a) In Australia, an additional five TRs have been prescribed as being able to accept transaction reports from Australian entities for the purposes of foreign reporting requirements.

(b) Central Registry Agency (CRA) has been authorised as a domestic TR in Turkey but is not yet actively operating; it is anticipated to start collecting data in the second half of 2016.

Appendix C: TRs and TR-like entities surveyed for this report

TRs

- BM&F Bovespa
- BSDR LLC
- CCIL
- CETIP
- Chicago Mercantile Exchange Inc.
- CME European Trade Repository
- DTCC-DDR
- DTCC Data Repository – Japan
- DTCC-DDRL
- DTCC Data Repository – Singapore
- HKMA-TR
- ICE Trade Vault
- ICE Trade Vault Europe
- KDPW Trade Repository
- Korea Exchange (KRX)
- CJSC National Settlement Depository (NSD)
- REGIS-TR
- SAMA TR
- UnaVista

TR-like entities

- Banco de México
- Bank of Korea
- CFETS
- Financial Supervisory Service
- Takasbank

Appendix D: Extent of reporting

Table 3

Trade Reporting Requirements in Place in FSB Member Jurisdictions

Jurisdiction	Commodity	Credit	Equity	FX	Interest rate	Coverage of financial entities
Argentina	Blue	Blue	Blue	Blue	Blue	Green
Australia	Blue	Blue	Blue	Blue	Blue	Green
Brazil	Blue	Blue	Blue	Blue	Blue	Green
Canada	Blue	Blue	Blue	Blue	Blue	Green
China	White	White	White	Blue	Blue	Green
EU	France	Blue	Blue	Blue	Blue	Green
	Germany	Blue	Blue	Blue	Blue	Green
	Italy	Blue	Blue	Blue	Blue	Green
	The Netherlands	Blue	Blue	Blue	Blue	Green
	Spain	Blue	Blue	Blue	Blue	Green
	UK	Blue	Blue	Blue	Blue	Green
Hong Kong	White	White	White	Light Blue	Light Blue	Light Green
India	White	Blue	White	Blue	Blue	Light Green
Indonesia	White	White	White	Blue	Blue	Light Green
Japan	White	Blue	Blue	Blue	Blue	Light Green
Korea	White	Blue	Blue	Blue	Blue	Light Green
Mexico	Blue	White	Blue	Blue	Blue	Light Green
Russia	White	White	White	Light Blue	White	Green
Saudi Arabia	White	White	White	Blue	Blue	Light Green
Singapore	White	Blue	White	Blue	Blue	Green
South Africa	Grey	Grey	Grey	Grey	Grey	Green
Switzerland	Grey	Grey	Grey	Grey	Grey	Green
Turkey	White	White	White	Light Blue	White	Light Green
US	Blue	Light Blue	Light Blue	Blue	Blue	Green

- Blue = mandatory reporting in whole asset class
- Light Blue = mandatory reporting in a subset within asset class
- Grey = rules written but either not in place or data collection not yet underway.
- Green = All types of financial entities (for Argentina, South Africa and Switzerland: anticipated coverage)
- Light Green = Deposit-taking institutions and in some cases some (but not all) other types of financial entities

Table 4
Estimated Coverage of Reporting Requirements and Exemptions in FSB Member Jurisdictions

As at September 2015

	Self-reported estimated coverage of the reporting requirements	Exemptions*		
		Participant type	Size of derivatives notional outstanding	Products
Argentina	80–90%			
Australia	80–90%		Entities with AUD 5–50 billion notional (until Apr 2015); Entities with less than AUD 5 billion notional (until Oct 2015)	Electricity derivatives
Brazil	100%			
Canada	80–100%	Government, crown corporations or agencies, municipalities, public institutions	If participant has less than CAD 0.5 million aggregate notional outstanding, neither party is a dealer and the underlying is a commodity other than cash or currency	Physically settled commodity derivatives
China	Close to 100%			
EU	Close to 100%			
Hong Kong	Around 20%		Entities with less than USD 30 million of total notional amount outstanding in a product class	
India	90–100%	Entities that are not banks and with less than USD 1 million in FX derivatives		Interest rate options in foreign currency
Indonesia	More than 90%			
Japan	Close to 100%			
Korea	80–100%			
Mexico	Close to 100%			
Russia	Unavailable			
Saudi Arabia	Around 95%			
Singapore	90–100%	Fund managers with less than SGD 8 billion assets under management Non-financial companies with derivatives under SGD 8 billion		Single-name credit derivatives
South Africa	None			
Switzerland	None			
Turkey	Unavailable			
United States	Close to 100%			

Unavailable = response not given

Appendix E: Legal barriers to reporting and authorities’ access to data⁴⁰

Table 5

Reporting to a TR or TR-Like Entity Pursuant to Domestic Reporting Requirements

Jurisdiction	Location of reporting entity						
	Domestic			Foreign			
	Location of TR						
	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Foreign
	Location of counterparty						
	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic
Argentina	Green	Green	Red	Red	Green	Green	Red
Australia	Green	Green	Green	Green	Green	Green	Green
Brazil	Green	Green	Yellow	Yellow	Green	Green	Yellow
Canada	Green	Green	Green	Green	Green	Green	Green
China	Green	Grey	Grey	Grey	Grey	Grey	Grey
EU	France	Green	Green	Green	Green	Green	Green
	Germany	Green	Green	Green	Green	Green	Green
	Italy	Green	Green	Green	Green	Green	Green
	The Netherlands	Green	Green	Green	Green	Green	Green
	Spain	Green	Green	Green	Green	Green	Green
	UK	Green	Green	Green	Green	Green	Green
Hong Kong	Green	Green	Red	Red	Green	Green	Red
India	Green	Green	Red	Red	Green	Green	Red
Indonesia	Green	Green	Red	Red	Green	Green	Red
Japan	Green	Green	Green	Green	Green	Green	Green
Korea	Yellow	Yellow	Red	Red	Yellow	Yellow	Red
Mexico	Green	Green	Red	Red	Grey	Grey	Grey
Russia	Green	Green	Red	Red	Green	Grey	Grey
Saudi Arabia	Green	Green	Red	Red	Grey	Grey	Grey
Singapore	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
South Africa	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Switzerland ^(a)	Green	Green	Green	Green	Green	Green	Green
Turkey	Green	Green	Grey	Grey	Grey	Grey	Grey
US	Green	Green	Green	Green	Green	Green	Green

- Green = reporting permitted
- Yellow = reporting permitted in some cases / subject to certain conditions (e.g. client consent)
- Red = reporting not permitted
- Grey = not applicable (e.g. domestic requirements not in place) / situation not clear / information not provided

(a) As of 1 January 2016

⁴⁰ Note that barriers reported in the tables in this appendix may only exist in relation to some, but not all, of the indicated scenarios.

Table 6

Reporting to a TR or TR-Like Entity Pursuant to Foreign Reporting Requirements

Jurisdiction		Location of reporting entity						
		Domestic			Foreign			
		Location of TR						
		Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	
		Location of counterparty						
		Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic
Argentina								
Australia								
Brazil								
Canada								
China								
EU	France							
	Germany							
	Italy							
	The Netherlands							
	Spain							
	UK							
Hong Kong								
India								
Indonesia								
Japan								
Korea								
Mexico								
Russia								
Saudi Arabia								
Singapore								
South Africa								
Switzerland ^(a)								
Turkey								
US								

■ = reporting permitted

■ = reporting permitted in some cases / subject to certain conditions (e.g. client consent)

■ = situation not clear / information not provided

(a) As of 1 January 2016

Table 7

Types of Legal Barriers to Domestic Participants Reporting Complete Information

Jurisdiction	Domestic participant reporting pursuant to <i>domestic</i> requirements				Domestic participant reporting pursuant to <i>foreign</i> requirements			
	Data protection	Client confidentiality	Blocking statutes	Other	Data protection	Client confidentiality	Blocking statutes	Other
Argentina								
Australia					cured by counterparty consent	cured by counterparty consent		
Brazil						cured by counterparty consent		
Canada								
China								
EU	France					cured by counterparty consent		
	Germany							
	Italy							
	The Netherlands				cured by counterparty consent			
	Spain				cured by counterparty consent	cured by counterparty consent		
	UK							
Hong Kong								
India						cured by counterparty consent		
Indonesia								
Japan					cured by counterparty consent			
Korea	cured by counterparty consent	cured by counterparty consent			cured by counterparty consent	cured by counterparty consent		
Mexico								
Russia								
Saudi Arabia							cured by domestic authority authorisation	
Singapore		cured by counterparty consent				cured by counterparty consent		
South Africa		cured by counterparty consent				cured by counterparty consent (only if report is made to TR or authority)		
Switzerland ^(a)						cured by counterparty consent		
Turkey						cured by counterparty consent		
US								

■ = no legal barriers

■ = barrier exists, but mitigant available to at least some degree

■ = situation not clear / information not provided

(a) As of 1 January 2016

Table 8

‘Masking’ of counterparty information

Jurisdiction	Is masking of TR data permitted or accommodated for counterparties which report according to the domestic reporting regime?	
Argentina	No	
Australia	Yes	
Brazil	No	
Canada	Yes	
China	No	
EU	France	No
	Germany	No
	Italy	No
	The Netherlands	No
	Spain	No
	UK	No
Hong Kong	Yes	
India	No	
Indonesia	No	
Japan	No	
Korea	No	
Mexico	No	
Russia	No	
Saudi Arabia	No	
Singapore	Yes	
South Africa	Under consideration	
Switzerland	No	
Turkey	No	
US	No for security-based swaps (SEC) Yes for swaps (CFTC) ^(a)	

(a) Masking is not permitted in the US. Nevertheless, pursuant to the CFTC’s time-limited no-action relief, the CFTC staff will not recommend enforcement action for a failure to report certain identifying information for enumerated jurisdictions.

Table 9
Authorities' Access to Data

Jurisdiction		Access to domestic TR data by domestic authorities other than the primary authority?	Is foreign authorities' direct access possible?		Is foreign authorities' indirect access possible?	
Argentina						
Australia					Direct access available	
Brazil						
Canada					Uncertain	
China						
EU	France		(a)	(b)		
	Germany		(a)	(b)		
	Italy		(a)	(b)		
	The Netherlands		(a)	(b)		
	Spain		(a)	(b)		
	UK		(a)	(b)		
Hong Kong					Direct access available	
India						
Indonesia						
Japan						
Korea						
Mexico						
Russia						
Saudi Arabia						
Singapore					Direct access available	
South Africa						
Switzerland ^(c)					Direct access available	
Turkey						
US			CFTC	SEC ^(d)		

= Access permitted, without any material conditions

= Access permitted, but with material conditions

= Access not permitted, or permitted with very significant/challenging conditions

= Under consideration

(a) For non-EU jurisdictions where there is no TR established, direct access to EU TR data can be granted to a foreign authority following the conclusion with ESMA of a MoU in accordance with the recommendations of the CPMI-IOSCO 2013 report on authorities' access to TR data.

(b) For non-EU jurisdictions where there is a TR established, direct access to EU TR data can be granted to a foreign authority following the conclusion with the EU of an International Agreement and with ESMA of a MoU in accordance with the recommendations of the CPMI-IOSCO 2013 report on authorities' access to TR data.

(c) As of 1 January 2016

(d) The SEC has proposed certain exemptive relief from the indemnification requirements that if finalised would allow direct access to SEC-registered TR data for certain domestic (and foreign) authorities if certain criteria are met.

Appendix F: Indicators of data quality

Table 10

Comparison of Aggregate OTC Derivatives Statistics and Effect of Multiple Counting

This table is intended to show only the extent of multiple reporting and the challenge it poses to correctly aggregating data. No attempt has been made to eliminate multiple reporting in Peer Review data and therefore this data is not an estimate of the size of the market.

Source	Trades Outstanding		Monthly Turnover ^(a)	
	Number of Transactions	Gross Notional Value USD mn	Number of Transactions	Gross Notional Value USD mn
Peer review: national authorities	55,592,691	1,882,143,750	34,549,462	447,528,270
Peer review: trade repositories	61,115,061	2,262,577,969	34,543,152	235,249,225
BIS surveys ^{(b), (c)}		630,149,685		Range ^(d) : 161,438,046 222,075,588

Gross notional value of trades outstanding

(a) Covers only foreign exchange and interest rate derivatives markets to make the peer review data comparable with the BIS surveys.
 (b) Trades outstanding at end-December 2014. Source: BIS Semi-annual OTC Derivatives Statistics. The statistics eliminate double-counting by halving the data on transactions between reporting dealers.
 (c) Turnover data at April 2013 (daily average). Source: BIS Triennial Central Bank Survey (covers only foreign exchange and interest rate derivative markets). Monthly turnover from this source computed by multiplying daily average by 21 (the number of working days in November 2014).
 (d) The BIS statistics report turnover on a gross-gross and net-net basis. The gross-gross basis is not adjusted for inter-dealer double-counting. The net-net basis is adjusted for local and cross-border inter-dealer double-counting. The net-net figure provides the lower bound of the range and the gross-gross figure provides the upper bound.

Table 11

Jurisdictions' Ability to Compute Basic Aggregates and Breakdowns

Drawing on TR data available to domestic authorities

Jurisdiction	Aggregate turnover	Breakdowns, by amounts outstanding and by turnover			
		Centrally cleared transactions	Domestic or foreign currency denomination	Interest rate swaps maturity buckets	Single-name vs multi-name CDS
Argentina					
Australia					
Brazil					(a)
Canada					
China					
EU	France				
	Germany				
	Italy				
	The Netherlands				
	Spain				
	UK				
Hong Kong					
India					
Indonesia					
Japan					
Korea					
Mexico					
Russia					
Saudi Arabia					
Singapore					
South Africa					
Switzerland					
Turkey					
US					

■ = authorities were able to compute figures

■ = authorities were able to compute for turnover but not for amounts outstanding

(a) The capacity to compute breakdowns for single-name vs multi-name CDS exists; however, to date there have been no CDS transactions of any kind reported.

Appendix G: Public disclosure of TR-held information

Table 12

Public disclosure of TR-held Information

Jurisdiction	Trade-by-trade	Aggregate-level	Asset classes	Frequency	Websites for public data disclosure	
Argentina	No	Yes	ALL	Daily	Not yet available	
Australia	No	Yes	ALL	Weekly	http://www.dtcc.com/repository-otc-data/asic-reports.aspx	
Brazil	No	Yes	ALL	Daily	http://www.bmfbovespa.com.br/shared/iframe.aspx?altura=2500&idioma=en-US&url=www.bmf.com.br/arquivos1/arquivos_ipn.asp?idioma=en-US&status=ativo http://www.cetip.com.br/controle-series-historicas/login.asp (in Portuguese)	
Canada	Yes ^(a)	Yes	ALL	1–2 days for transaction-level data / Weekly for aggregate-level data	http://www.dtcc.com/repository-otc-data/canada-reports.aspx	
China	No	Yes	IR, FX	Daily and monthly	http://www.chinamoney.com.cn/en/index.html	
EU ^(b)	France	No	Yes	ALL	Weekly	http://www.dtcc.com/repository-otc-data/emir-public-reports.aspx
	Germany					http://www.lseg.com/markets-products-and-services/post-trade-services/unavista/unavista-solutions/emir-trade-repository/trade-repository-public-data
	Italy					http://www.registr.com/index.php/services/public-data
	The Netherlands					ftp://ftp.cmegroup.com/grs/etr/
	Spain					https://www.icetradevault.com/tveu-reports/
	UK					http://www.kdpw.pl/en/Trade%20Repository%20EMIR/Pages/default.aspx
Hong Kong	Under consideration					
India	No	Yes	CR, IR, FX	Real-time	https://www.ccilindia.com/Pages/default.aspx	
Indonesia	No public disclosure of data					
Japan	No	Yes	ALL	Quarterly	http://www.fsa.go.jp/status/otcreport/index.html (in Japanese)	
Korea	No	Yes	ALL	Quarterly	http://efisis.fss.or.kr/fss/fsi/id/mi_install/fssinstall_en.jsp?opt=etc	
Mexico	No	Yes	IR	Daily	http://www.banxico.org.mx/portal_disf/wwwProyectoInternetDerivados_ing.jsp http://www.banxico.org.mx/portal_disf/wwwProyectoInternetDerivados_me_ing.jsp	
Russia	No public disclosure of data					
Saudi Arabia	No public disclosure of data					
Singapore	Under consideration					
South Africa	No	Yes	ALL	Weekly	No TR currently authorised	
Switzerland	TR reporting not yet effective – Aggregate public disclosure mandated for future TRs					

Table 12

Public disclosure of TR-held Information

Jurisdiction	Trade-by-trade	Aggregate-level	Asset classes	Frequency	Websites for public data disclosure
Turkey	No	Yes	'Leveraged transactions' only (FX trading)	Yearly	https://www.takasbank.com.tr/en/Pages/StatisticalInformations.aspx
US	Yes ^(c)	Yes	ALL	Real-time for CFTC transaction-level data / 24 hours for SEC transaction-level data / weekly for aggregate-level data	https://rtdata.dtcc.com/gtr/dashboard.do http://www.bloombergsdr.com/ http://www.cmegroup.com/trading/global-repository-services/cme-swap-data-repository.html https://www.icetradevault.com/

- (a) From July 2016, TRs in Manitoba, Ontario and Québec will be required to publicly disseminate transaction-level information about OTC derivatives trades.
- (b) From January 2017, EU trading platforms will disseminate transaction-level information about OTC derivatives trades.
- (c) The CFTC currently requires public dissemination of transaction-level information about swap trades. The SEC's Regulation SBSR will require public dissemination of transaction-level information about security-based swap trades.

Appendix H: CPMI–IOSCO illustrative list of potential data fields for OTC derivatives

Examples of data fields for interest rate swaps⁴¹

	Description
Unique transaction identifier	
Unique product identifier	Product type based on taxonomy of product.
Contract type	E.g. swap, swaption, forwards, options, basis swap, index swap, basket swap, other.
Identifier of reporting counterparty	
Identifier of non-reporting counterparty	
Counterparty origin	Indicator of whether a transaction was done on behalf of a customer or house account.
Parent counterparty	The parent company of the counterparty.
Cleared	An indicator of whether a contract has been cleared.
Clearing entity	Name of the clearing organisation where a contract was cleared.
Clearing exemption	Y/N. Are one or more counterparties to the contract transaction exempted from clearing?
Confirmed	An indicator of whether a contract has been confirmed by both parties.
Master agreement type	The type of master agreement that was executed.
Master agreement date	Date of the master agreement.
Effective date or start date	The date a contract becomes effective or starts.
Maturity, termination or end date	The day a contract expires.
Settlement method	The agreed-upon way of settlement.
The amount and currency or currencies of any upfront payment	Deliverable or non-deliverable.
A description of the payment streams of each counterparty	E.g. coupons.
Notional amount / total notional quantity	Total currency amount or total quantity in the unit of measure of an underlying commodity.
Notional currency / price currency	Notional currency.
Payer (fixed rate)	Is the reporting party a fixed rate payer? Yes / no / not applicable.
Direction	For swaps – if the principal is paying or receiving the fixed rate. For float-to-float and fixed-to-fixed swaps, it is unspecified. For non-swap instruments and swaptions, the instrument that was bought or sold.

⁴¹ Source: CPMI–IOSCO (2012), *Report on data reporting and aggregation requirements*, January, pp.58–59; available at: <http://www.bis.org/cpmi/publ/d100.pdf> and <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD366.pdf>.

	Description
Fixed rate	
Fixed rate day count fraction	
Fixed leg payment frequency	How often the payments on the fixed leg will be made.
Floating rate payment frequency	
Floating rate reset frequency	
Floating rate index name/rate period	
Option type	E.g. put, call, straddle.
Call, put or cancellation date	Information needed to determine when a call, put or cancellation may occur with respect to a transaction.
Option expiration date	Expiration date of the option.
Option premium	Fixed premium paid by the buyer to the seller.
Option premium currency	The currency used to compute the premium.
Option style	American, European, Bermudan, Asian.
Strike price (cap/floor rate)	The strike price of the option.
Value for options	The value of the option at the end of every business day.
Any other terms related to option	
Lockout period	Date of first allowable exercise.
Any other primary economic term(s) matched by the counterparties in verifying the swap	
Order entry timestamp	The time and date when the order was entered.
Submission of order entry timestamp	The time and date when the order was sent to the platform to be executed.
Execution timestamp	The time and date a contract was executed on a platform.
Submission timestamp for clearing	The time and date when a contract was submitted to a clearing organisation.
Clearing timestamp	The time and date a contract was cleared.
Reporting date	The time and date the transaction was submitted to the TR.
Data elements necessary to determine market value of transaction	The value of the transaction at the required frequency.
Initial margin requirement	The initial margin requirement that has been required by the parties.
Maintenance margin requirement	The maintenance margin requirement that has been required by the parties.
Variation margin	The amount that is paid daily in order to mark the transaction to market.
Long option value	The long option value contained in the maintenance margin requirement.
Short option value	The short option value contained in the maintenance margin requirement.

Appendix I: Definitions and abbreviations used in this report

- **Authorised** means registered, licensed, recognised, exempted, or otherwise allowed to provide services in a jurisdiction.
- **Consent** means all governmental and other consents (including any consent, approval, agreement, authorisation or other action of any party) that are required to have been obtained with respect to reporting trade data to a TR or other entity or authority.
- **CPMI** – Committee on Payments and Market Infrastructures⁴²
- **Domestic** means located in the indicated jurisdiction. This does not include domestic branches or subsidiaries of foreign banks or other corporate groups. For EU member states, *Domestic* means located in the EU.
- **Foreign** means located in a jurisdiction other than the indicated jurisdiction. This includes branches or subsidiaries of foreign banks or other corporate groups located in the indicated jurisdiction. Entities that are located in a foreign jurisdiction but are authorised to operate in the domestic jurisdiction are classified as foreign entities. For EU member states, *Foreign* means located in a jurisdiction other than the EU.
- **FSB** – Financial Stability Board
- **IOSCO** – International Organization of Securities Commissions
- **LEI** – Legal Entity Identifier
- **Masking** means allowing a counterparty subject to a reporting requirement to anonymise the identity of its counterparty, through redaction or other means.
- **Primary authority** means the authority with the primary responsibility for regulating a TR, where that TR is receiving data pursuant to the laws or rules of that authority's jurisdiction.
- **Standing consent** means a consent that can be provided once but applies to all future transactions between the same counterparties.
- **Trade repository (TR)** means an entity, facility, service, utility, etc. that has been authorised as a trade repository.
- **TR-like entity** means an entity, facility, service, utility, government authority, etc. that is not an authorised TR but that is used by market participants to report OTC derivatives trade data, or provides TR-like services.
- **Trade data** means data regarding OTC derivatives transactions reported to a TR.
- **Trade participant** means market participants that are required to report trade data or that report trade data voluntarily.

⁴² Before September 2014, CPMI was known as the Committee on Payment and Settlement Systems (CPSS).

- **Turnover** means new deals negotiated during a given period, considered on a gross (netting and offsets should be ignored) and pre-novation (only the original transaction before it is cleared) basis.⁴³
- **UPI** – Unique Product Identifier
- **UTI** – Unique Trade/Transaction Identifier

⁴³ Note that this definition is the same one used in the BIS Triennial Central Bank Survey of foreign exchange and derivatives market activity (for more information on the reporting guidelines for this survey, see http://www.bis.org/statistics/triennialrep/guidelines_cbanks.htm).