About DTCC

With over 40 years of experience, DTCC is the premier post-trade market infrastructure for the global financial services industry. From operating facilities, data centers and offices in 15 countries, DTCC, through its subsidiaries, automates, centralizes, and standardizes the post-trade processing of financial transactions, mitigating risk, increasing transparency and driving efficiency for thousands of broker/dealers, custodian banks and asset managers worldwide. User owned and industry governed, the firm simplifies the complexities of clearing, settlement, asset servicing, data management and information services across asset classes, bringing increased security and soundness to the financial markets. In 2013, DTCC’s subsidiaries processed securities transactions valued at approximately US$1.6 quadrillion. Its depository provides custody and asset servicing for securities issues from 139 countries and territories valued at US$43 trillion. DTCC’s global trade repository processes tens of millions of submissions per week.

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Abstract

Progress on global derivatives reform is at a critical juncture. The lack of transparency, identified during the 2008 crisis as critical to the supervision of the financial system, remains only partly addressed.

As a result, the cross-border identification of systemic risk remains beyond the reach of macroprudential authorities. Trade repositories, heralded as essential to achieving greater transparency in the global derivatives markets, have not been able to reach their full potential as tools for systemic risk oversight.

It is imperative that a plan of action, together with a concrete timetable, is agreed upon to remove the remaining barriers, practical and legal, that would turn the aspiration of global derivatives market transparency, and the identification and management of global systemic risk, into a reality.
Executive summary

The global financial crisis of 2008 shook the foundations of the financial system to the core. This period was followed by a commitment, at a global level, led by the Group of 20 (G20) to take a number of measures which would enhance the transparency in the derivatives market and improve the global response to systemic risk stemming from cross-border derivatives trading activities.

The policy response which followed the G20 commitments was, however, developed along national or regional lines, thus focusing on the identification of risk originating at a local level and posing risk to the stability of the respective local jurisdictions. This approach, which was driven by micro-prudential regulatory requirements, has resulted in a fragmented regulatory landscape that is unable to respond to the original G20 goal of preserving the integrity of the global financial system as a whole.

The fact that this policy response has not been tested to date does not mean that the risks that the financial system faced in 2008 are less real. Derivatives markets remain as global and as interconnected as ever. Whilst achieving transparency, albeit at a local level, has been a significant accomplishment for both the regulatory community and the industry, we should not confuse this level of transparency with the ability to monitor and identify systemic risk and thereby protect and preserve global financial stability.

As the dust settles on the first phase of the reforms which immediately followed the financial crisis, it is imperative that we take a step back to assess the progress made to date against the G20 commitments and agree a plan of action to enable macro-prudential regulators to address the original G20 mandate.

This paper provides an analysis of current status against the G20 goal of increasing global derivatives market transparency, and identifies what is still required to ensure that the G20 aspirations are turned into a reality.

We call on the global regulatory community for a harmonised global plan of action with an appropriate timetable to:

- Reach agreement on the global data set required to identify systemic risk.
- Revise existing laws which prevent cross-border data sharing.
- Agree consistent data standards to be adopted across jurisdictions, leveraging existing standards where possible.
- Agree a governance model enabling cross-border data sharing. This could leverage proven governance models such as that defined by the OTC Derivatives Regulators’ Forum (ODRF) around the credit derivatives Trade Information Warehouse (TIW), the forerunner of the modern trade repository.
Introduction

Over five years ago, G20 finance ministers and central bankers, in response to the most severe financial crisis since the Great Depression, made a commitment to “adopt a set of policies, regulations and reforms to meet the needs of the 21st century global economy.”

Among these was the commitment to make the global over-the-counter (OTC) derivatives markets safer and more transparent, and to create powerful tools for the supervision of global participants.

More specifically:

- The G20 agreed that “all standardized OTC derivative contracts should be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central counterparties. OTC derivative contracts should be reported to trade repositories. Non-centrally cleared contracts should be subject to higher capital requirements.”
- The G20 leaders further called on the Financial Stability Board (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.”

That the G20 aim was to promote global financial stability was already evident at its earlier London summit, in April 2009, where it committed to:

- Strengthening financial supervision and regulation by “establishing much greater consistency and systematic cooperation between countries, and the framework of internationally agreed high standards that a global financial system requires.”
- “Amend our regulatory systems to ensure authorities are able to identify and take account of macro-prudential risks across the financial system … to limit the build-up of systemic risk.”

It further added that:

- “We will ensure that our national regulators possess the powers for gathering relevant information on all material financial institutions, markets, and instruments in order to assess the potential for their failure or severe stress to contribute to systemic risk. This will be done in close coordination at international level in order to achieve as much consistency as possible across jurisdictions.”

This commitment was followed by the adoption, in November 2009, of the 20 recommendations put forward by the International Monetary Fund (IMF) and the FSB in their report “The Financial Crisis and Information Gaps”. The report identified four areas in which data gaps would need to be addressed, namely to better capture the build-up of risk in the financial sector, to improve data on international financial network connection, to monitor the vulnerability of domestic economies to shocks, and to enable communications of official statistics.

Since then, important steps have been taken towards developing a framework to address these goals for the global derivatives market. Trade reporting regimes are now in place in major derivatives jurisdictions around the world and national regulators have access to more derivatives trading data than ever before.

In its 2009 Pittsburgh statement, the G20 said that a “sense of normalcy should not lead to complacency”. This statement is more relevant today than ever before as we put increasing time and distance between the current signs of global recovery and the almost catastrophic crisis of 2008.

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It is against this backdrop that this paper aims to address five fundamental questions:

- Has the G20 policy response brought about the required transparency?
- Can existing data collection satisfy the G20 mandate?
- What are the practical challenges to improving data quality and converting data into information?
- What legislative hurdles need to be overcome to ensure that data can be shared globally?
- What are the possible governance models for cross-border data sharing?
1. Has the G20 policy response brought about the required transparency?

Although much transparency has been created through national reporting regimes, the answer must be a resounding ‘no’ if we measure success against the original G20 goal of creating the transparency which would help identify and mitigate global systemic risk.

Major derivatives jurisdictions around the world have developed legislative frameworks to mandate reporting of derivative trades to trade repositories and have devised detailed local rules and designated authorised trade repositories to operate within their domains. But far from achieving the global consistency implicitly aspired to by the G20, this localised approach has resulted in divergences between reporting regimes which can be grouped into three categories:

- **SCOPE OF REGULATIONS:** For example, jurisdictions across Asia-Pacific, the US and Canada mandate reporting of OTC derivatives trades only, while in the EU reporting of exchange-traded derivatives also forms part of the scope;
- **REPORTING OBLIGATIONS:** Single versus dual sided reporting is mandated inconsistently between EU, US and Asia-Pacific
- **REPORTABLE DATA:** Regional variations exist in the data fields that are reportable, although there is some consistency in a core set of data fields

In a paper published in April 2013⁴, DTCC argued that to achieve the G20 goals of transparency required an optimal trade reporting framework which consisted of harmonised reporting requirements across jurisdictions and one single repository collecting data as a public good.

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⁴ “New infrastructures for a sounder financial system”, Michael C. Bodson, CEO, DTCC, Financial Stability Review, Banque de France, April 2013

Fig.1. DTCC’s original vision for the global trade repository model
However, what we have today is exactly the opposite, a derivatives reporting environment, fragmented across jurisdictions as well as across multiple repositories. It is clearly impractical to wind back the clock on these developments, it is imperative that we focus on creating the necessary conditions for the reporting function to fulfil the G20 mandate.

![Diagram](image)

**Fig.2. The current trade reporting reality**
2. Can existing data collection satisfy the G20 mandate?

Notwithstanding divergent reporting requirements which exist across major derivatives jurisdictions, data is being collected and on the whole compliance has been good. However, data collection itself is not sufficient to address the transparency goal. What is needed is the ability to aggregate this data, convert it into information and then use it to monitor the build-up of risk in the system.

To understand the challenge of aggregating the data and converting it into information requires a distinction between the requirements of microprudential regulators for the purposes of local market surveillance, and the requirements of macroprudential regulators for the purposes of monitoring the build-up of risk.

To ensure that both regulatory functions can be performed, any efforts to address the derivatives aggregation challenge should therefore be preceded by a clear distinction between two tier data sets – both a national or regional data set for the purposes of market surveillance together with a smaller global data subset for systemic risk oversight.

- The first dimension of the data set required for microprudential supervision is well served by the current national reporting regimes. This data set includes numerous data fields which national regulators require to be able to perform their own analysis on a number of issues related to local market surveillance. In jurisdictions with multiple trade repositories, given that all relevant local market data is housed in locally authorised trade repositories, the challenge of aggregating that data and converting it into useable information is predominantly an issue of having common local standards and appropriate analytical tools – an important challenge, but certainly not insurmountable.

- The second dimension of a derivatives data set — the global data set required for systemic risk surveillance — is more challenging to implement. Namely, it requires:
  - Cross-border agreement on a specific set of data needed for systemic risk identification;
  - Adoption of consistent reporting standards across jurisdictions for those specific data fields;
  - Definition of the population required to report;
  - Removal of legal barriers to data sharing;
  - Agreement on a governance model for data sharing.

In the following chapters, we explore the actions required to overcome these practical and legal hurdles.
3. What legislative hurdles need to be overcome to ensure that data can be shared globally?

Before data can be aggregated at a cross-border level and used by the relevant supervisory authorities, significant legal barriers need to be removed. Failure to address these legal barriers would make all other efforts to address derivatives transparency futile. Removing legal barriers to data sharing — some of which predate derivatives reform such as data protection laws, blocking statutes, state secrecy laws and bank secrecy laws — requires international regulatory cooperation for the greater public good.

Today, regulatory cooperation happens on many levels. Currently unique among them is the bilateral Memorandum of Understanding signed between the Australian Securities and Investments Commission (ASIC) and the Monetary Authority of Singapore (MAS) allowing trade repositories licensed in one jurisdiction to provide relevant data to the authority in the other jurisdiction. This agreement, together with ASIC’s alternative trade reporting arrangements which allow firms already reporting to a recognised trade repository in another jurisdiction, to discharge their reporting obligation in the ASIC jurisdiction, is a step towards fostering greater cooperation between international regulators which will be essential for successful cross-border oversight. We applaud the initiative of these two authorities and hope it sets an important global precedent.

Bilateral agreements are useful steps towards building the case for greater cooperation as they make eventual data sharing easier at a multi-lateral level. However, multi-lateral agreements are a quicker way to achieving the ultimate goal of global transparency mandated by the G20.

For agreements at a multi-lateral level to work, revision of some legislative provisions which prohibit data from being shared need to be undertaken. For example, the Dodd-Frank Act in the US incorporates an ‘indemnification clause’ requiring non-US regulators to indemnify US regulators and trade repositories from possible data misuse before access is granted. This creates a financial cost as well as a legal impediment for non-US regulators, and effectively prevents them from viewing data relevant to their jurisdictions collected and held by trade repositories located in the US and operating under the Dodd-Frank Act. Revision of legislation is the only way to ensure privacy laws and other legislative hurdles do not compromise the efforts towards data aggregation which are needed to ensure the regulators have a complete and timely picture of risk in the system. However, bringing legislative change remains extremely challenging.

The need for such change was further stressed in a recent letter from the OTC Derivatives Regulators’ Group (ODRG) to the FSB Chairman, Mark Carney. The ODRG called for urgent changes, including legislative changes where required, to remove provisions that prevent the identification of counterparties under reporting obligations to trade repositories. The ODRG further makes the case for setting a deadline for the unmasking of counterparty information, and recommends the FSB seek the G20 leaders’ agreement to ensure the removal of those barriers.

The agreement on the global data set that is required for systemic risk oversight should make regulatory cooperation and removal of legislative hurdles easier as it will focus attention on a specific data set needed for systemic risk oversight, rather than numerous fields which are required for market surveillance. The information should be sufficiently high level (e.g. LEI counterparty level information) to allow the relevant authority to address any legislative limitations on sharing those specific fields.

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4. What are the practical challenges to improving data quality and converting data into information?

Following the removal of legal barriers, market infrastructures can play an important role in supporting data quality efforts to ensure that data can be turned into globally useful information. We believe these efforts should focus on the following areas:

GLOBAL DATA SET

Global regulators must agree on the set of data fields which, at a global level, can be used to identify the impact of market activity outside their jurisdiction on their jurisdiction, and vice-versa.

To understand why this data set would differ from the current national reporting requirements, consider this scenario. During the collapse of Lehman Brothers, if two parties outside the US were trading on an underlying Lehman Brothers asset, data collected under US rules, which allow for the supervision of US persons only, would have misrepresented the scale of the problem.

Advancing systemic risk oversight, therefore, requires an agreement on the global data set to be aggregated which mitigates the interconnectedness of the financial system.

And before you say ‘not possible!’, the credit derivatives markets provide an important precedent of how such a global data set can deliver the transparency that global regulators require to monitor risk in the system 6.

Once an agreement on this global data set has been reached, the focus on improving data quality by advancing consistent standards can begin.

GLOBAL IDENTIFIERS

Much has been said about the importance of adopting consistent data standards across jurisdictions, and the focus of the debate has often centred around three particular standards which relate to information on the product, taxonomy, and the counterparties to a trade. While these standards are important, our view is that their use, whilst helpful, does not address the lack of standards across a number of other fields. For aggregation at a global level to work, data standards for all fields required for aggregation must be agreed upon.

The Legal Entity Identifier (LEI) is the standard that is most evolved in that regard. We have a situation where a global standard is being adopted, but more work is required to enforce its usage.

The Unique Product Identifier (UPI) does not exist in any meaningful way; different regulations allow for products to be expressed in different ways and the product taxonomy is not granular enough. For UPIs to work, a global standard must be adopted and enforced.

The case of the Unique Trade Identifier (UTI) is slightly different from the above in that the difficulty is not in adopting a consistent standard for generating a unique code, but in establishing an infrastructure which is needed to exchange the identifier between trading counterparties in time for reporting cycles.

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6 See boxout on ODRF
DATA STANDARDS

At a local level, the issue of data standardisation stems from the fact that local rules in place today are frequently not granular enough to recommend specific data standards. Data standardisation remains a highly desirable outcome and must continue to be improved through a concerted effort by both the industry and the repositories, in collaboration with local market regulators. However, this will take time. To accelerate the development of appropriate systemic risk oversight and ensure that the quality of data is fit for purpose, we recommend that work to standardise fields within the global data set which are subject to the aggregation mandate must begin immediately.

The principles for Financial Market Infrastructures (FMIs) which have been published by the International Organisation of Securities Commissions (IOSCO) and are being monitored by the Committee on Payments and Market Infrastructures (CPMI) provide a useful foundation upon which to further build towards agreeing common international standards for reporting of derivatives trades.

The principles for FMIs could be extended in scope to include data requirements and standards which may have some commonality with existing requirements in jurisdictions which have mandated trade reporting, but resulting in an outcome which provides harmonisation of the requirements and standardisation of data at a global level.

Ideally, a single standard setting authority should be responsible for monitoring the adoption of standards in national rulemaking, monitoring compliance with those rules as well as outcomes. This is a proven three level process which has been successfully adopted by the Basel Committee and the CPMI on monitoring the principles for FMIs, and could be extended in scope to create the necessary conditions for aggregating the derivatives data for the purposes of monitoring systemic risk.
5. What are the possible governance models for cross-border data sharing?

Once the global data set has been identified, it is natural to turn attention to the question of what governance framework is required for data sharing.

A governance model would set the conditions upon which regulators could access each other’s data, e.g. on the basis of entitlements, based upon a jurisdiction’s market share in the global derivatives markets.

Important precedents exist at a multi-lateral level which show that regulatory cooperation can make cross-border data sharing possible. It would be impossible to imagine the response to any global issue – from air traffic control, nuclear safety, global health, terrorism – without a framework for global data sharing. What these numerous examples tell us is that, while they may not be perfect, they are certainly achievable. The derivatives market is no exception.

The governance model can be founded upon an entitlement scheme, such as the one adopted by the ODRF for credit derivatives, based on the regulator type. What this means in practice is that the entity should be provided with a set of guidelines on how information needs to be presented in terms of aggregation, the underlying detail, and allow access based on the individual regulator’s authority. Establishing the criteria for this will require agreeing what is the nature of the trade which leads that trade to be available to another regulator. At the high level, this can come down to either the domicile of the counterparty or the domicile of the underlying reference entity that was being traded in the credit derivatives world.

What the ODRF example shows us in particular is that existing infrastructures can be leveraged to perform the aggregation of OTC derivatives data, provided the relevant supervisory authorities agree on a governance layer. For aggregation to work, as demonstrated in the credit derivatives markets, you need to have consistent data with very clear access rules.

**THE OTC DERIVATIVES REGULATORS’ FORUM**

The OTC Derivatives Regulators’ Forum (ODRF) is comprised of international financial regulators including central banks, banking supervisors, and market regulators, and other governmental authorities that have direct authority over OTC derivatives market infrastructure providers or major OTC derivatives market participants, or consider OTC derivatives market matters more broadly. It was formed in 2009 to provide regulators with a means to cooperate, exchange views and share information related to OTC derivatives CCPs and trade repositories.

ODRF began coordinating the voluntary sharing of credit derivatives data held by trade repositories, across jurisdictions and in accordance with governance and clear access guidelines. DTCC, having established its Trade Information Warehouse (TIW), a trade repository and post-trade processing infrastructure for OTC credit derivatives in 2006, used the guidelines provided by the ODRF to provide global regulators access to detailed transaction data on virtually all credit derivatives trades executed worldwide in which they have a material interest to monitor systemic risk.

The success of this initiative was due to the fact that data was standardised and aggregated in the TIW, supported by a data sharing agreement which meant that data could be accessed and interpreted by regulators globally in accordance with the ODRF guidelines. While the ODRF did not facilitate an agreement on the adoption of consistent standards, it remains a useful example of a well-functioning governance model, demonstrating the potential of what can be achieved if you have:

- consistent data standards;
- data aggregated in one place;
- clear access rules;

7 See boxout on the OTC Derivatives Regulators’ Forum (ODRF) which governs data sharing in the credit default swaps market, and Bank of International Settlements International Banking Hub which has been developed by the FSB to improve the collection and sharing of information linkages between global systemically important financial institutions and their exposure to different sectors and markets.

Conclusion

Trade repositories have the potential to become powerful tools in identifying systemic risk, but they are currently unable to perform this role because there are practical and legal impediments which make transparency unattainable.

Urgent action is required to remove these barriers and any efforts should focus on five key areas:

• First, there needs to be an agreement on the global data set required to identify systemic risk.
• Second, existing laws which prevent cross-border data sharing must be reviewed.
• Third, consistent standards which apply to this data set must be adopted across jurisdictions, leveraging existing standards where possible. This will require appointing a standards authority which would monitor and enforce their adoption.
• Fourth, a governance model which enables data sharing among regulators must be agreed upon. This should leverage where possible proven governance models such as the one adopted by the ODRF.
• Fifth, a timetable for action should be agreed upon, supported by the G20, providing a framework for the completion of the work which began in 2009.

Only when these steps have been taken, we can finally put real distance between us and the 2008 financial crisis, confident that the lack of transparency which nearly brought the financial system to collapse has truly been addressed.

For Further Information about your derivatives reporting requirements, please visit www.dtcc.com/gtr