

# Trade Repositories and their role in the financial marketplace

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# 1 Background

The recent financial crisis of 2008 was marked by the collapse of large and globally established financial institutions such as Bear Sterns, the bankruptcy of Lehman Brothers, and the bailout of AIG due to their participation in OTC derivatives markets. The role of these markets in the crisis has led to strengthen discussions among regulators and policy-makers around the world about structural improvements to be made to the financial markets. The efforts to improve the stability and resilience of the international financial market center around a set of key aspects (BIS-IOSCO, 2010):

1. Improvements in banks own risk management systems.
2. Reform of capital requirement.
3. Regulation of liquidity.
4. Macro-prudential financial supervision to monitor systemic risk, with a focus on *systemically important institutions*.
5. Better market infrastructure to monitor the concentration of risk growing between pairs or groups of market participants.

Of these, the crisis has intensified the focus on the last two aspects: of the need to monitor systemic risk in a more focussed manner, and how to strengthen market institutions that can do it better. In terms of the structural deficiencies in the financial market infrastructure, whilst over-the-counter (OTC) derivatives were not the sole cause of the crisis, several weaknesses in the design of derivatives markets become apparent as a consequence. The complex and opaque nature of this market has led to a corresponding inability of regulators to have a clear understanding of risk exposure among participants. This becomes especially problematic when the participants themselves are unable to assess their own risk. Thus, the very opacity of the derivatives markets has increased the probability of contagion, and exacerbated the crisis as some market participants ended up building excessive risk positions.

Regulators currently do not have a practical means of acquiring a full picture of the direct and indirect counterparty credit risk exposures across all market participants. This incomplete picture of risk exposures makes it difficult for regulators to gauge the concentration of risk-taking activities among partic-

ipants or across markets. During times of stress, this incomplete picture of risk exposures is an additional complication for any official action taken to stabilise the markets.

Over the past several years there has been a coordinated effort by public and private sector entities to improve the post trade infrastructure for the OTC derivatives market so as to improve the transparency and monitoring of emerging risk. One such effort has been the establishment of Trade Repositories (TRs), a central point of information of all outstanding OTC derivatives transactions (FSB-WS, 2010).

When fully operational, trade repositories could prove to be a vital source of increased transparency in the market. They could provide information to authorities, market participants and the public about counterparty exposures. This will, in turn, be of use to authorities in carrying out their responsibilities of (i) assessing systemic risk and financial stability; (ii) conducting market surveillance and enforcement; (iii) supervising market participants; and (iv) taking action to resolve problems. Trade repositories can also fulfil an important function as a source of data and downstream event processing services for market participants.

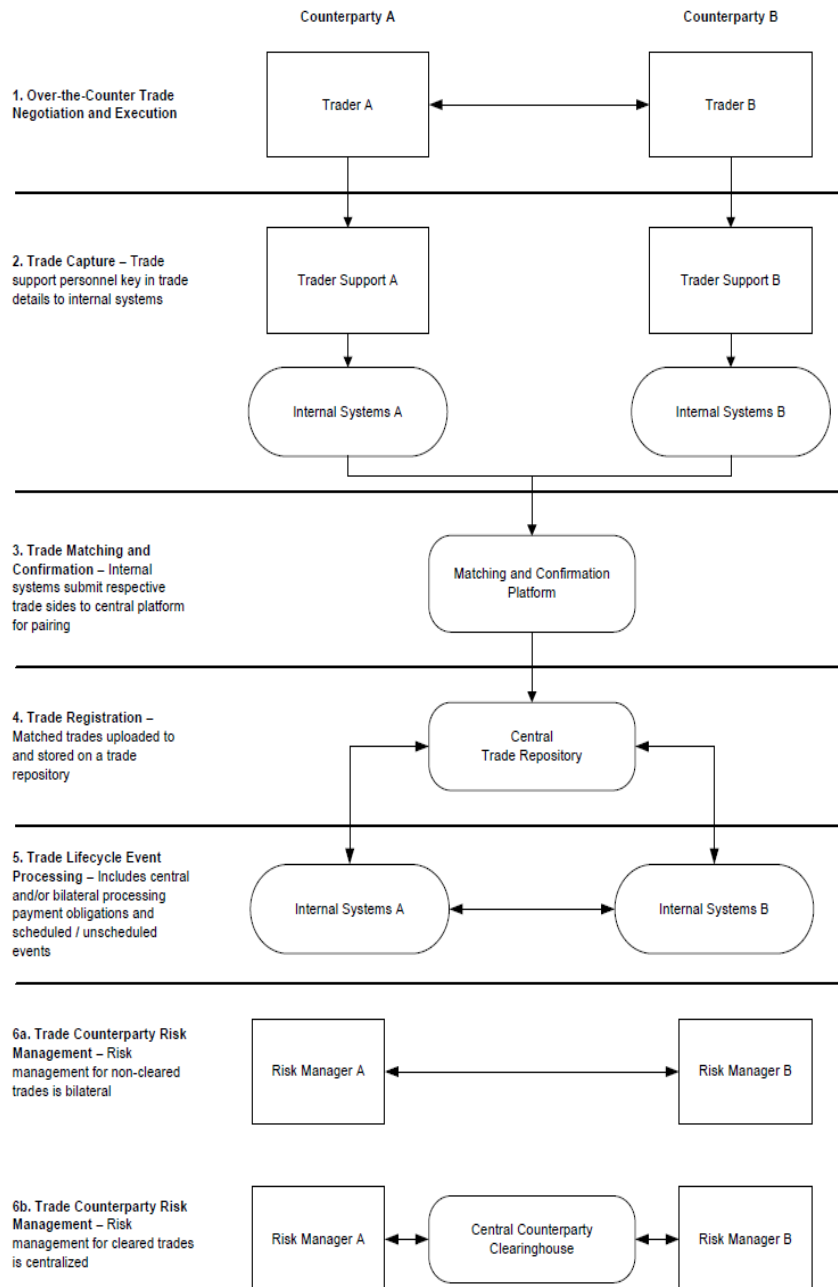
## **2 What is a trade repository?**

A trade repository (TR) for OTC derivatives is a centralised registry that maintains an electronic database of the records of open OTC derivatives transactions. The primary public policy benefit of a TR stems from the improved market transparency facilitated by its record keeping function, the integrity of information it maintains and effective access to this information by relevant authorities, market participants and the public in line with their respective information needs. A TR may also engage in the management of trade life-cycle events and downstream trade processing services based on the records it maintains.

The position of TR for a OTC derivative transaction is graphically depicted in the post-trade processing life-cycle diagram shown in Figure 1.

A well designed TR that operates with appropriate risk controls can provide an effective mechanism to collect and disseminate reliable data in a timely

**Figure 1** Post-trade processing flowchart in the operations of TRs



and proper manner to relevant authorities, market participants and the public, thereby strengthening the scope and quality of information available regarding the OTC derivatives market. Authorities can use this data source to identify and address vulnerabilities in the financial system and develop better-informed regulatory, supervisory, and other policies that promote financial stability and reduce systemic risk. Use of trade repository data also should help authorities to improve execution of their prudential supervision and resolution mandates, and to permit better market surveillance in service of the objective of protecting against market abuse.

In the absence of a TR, transaction data is maintained by individual counterparties and often stored in proprietary systems in various formats with different data fields. Thus TRs help to standardize and provides consistency in the quality and availability of transaction data. However, it should be clear that the data recorded in a TR cannot be a substitute for the records of transactions at original counterparties. Therefore, it is important that even where TRs have been established and used, market participants maintain their own records of the transactions and reconcile them with their counterparties or TRs on an ongoing basis.

For TRs to be able to fulfil these roles, it is critical that they are able to provide authorities with a global view of the OTC derivatives market for each asset class, covering all centrally cleared and non-centrally cleared transactions, accurately and in a timely manner.

## **2.1 Some pre-requisites for trade repositories**

There are a set of factors that needs to be discussed, documented and put in place in order to develop the institutions of trade repositories (BIS, 2010; BIS-IOSCO, 2010):

1. Legal framework - It should have a well founded, transparent and enforceable legal basis for each aspect of its activities in all relevant jurisdictions.
2. Market transparency and data availability - It should make data available to relevant authorities and the public in line with their respective information needs.

3. Operational reliability - It should identify sources of operational risk and minimise them through the development of reliable and secure systems, controls and procedures. System should be scalable and business continuity plans and backup facilities should be established.
4. Governance - It should have a clear and transparent governance arrangement to fulfil public interest requirements and to support the objectives of owners and participants. They should recognise the TRs unique role and responsibilities in the markets it supports.
5. Access and participation - It should have objective and publicly disclosed access and participation criteria that permit fair and open access and participation by market participants, market infrastructures and other service providers that seek to join or link with the TR.
6. Safeguarding of data - It should implement appropriate policies and procedures, and devote sufficient resources, to ensure the confidentiality and integrity of information.
7. Timely record keeping - A TR should promptly record the trade information it receives from its participants. To ensure the accuracy and currency of data, a TR should employ timely and efficient record keeping procedures to document changes to recorded trade information resulting from subsequent post-trade events.
8. Risks in link - A TR that establishes domestic or cross-border links with other TRs, market infrastructures or service providers should evaluate the potential sources of risks that can arise, and ensure that the risks in the design and operation of such links are managed prudently on an ongoing basis. There should be a framework for cooperation between the relevant authorities of the linked entities.
9. Communication procedures and standards - A TR should use or accommodate the relevant international communication procedures and standards in order to facilitate efficient, accurate and reliable exchange and recording of trade information.
10. Efficiency - While maintaining safe and secure operations, it should be cost-effective in meeting the requirements of users as well as in establishing interoperability with other TRs or interconnectivity with other market infrastructures and service providers.

11. Service transparency - A TR should provide market participants with sufficient information on its services to allow them to identify and evaluate accurately the risks and costs associated with using the services.
12. Regulation and oversight - A TR should be subject to transparent and effective regulation and oversight. In both a domestic and an international context, relevant authorities should cooperate with each other.

## **2.2 Global trade repositories today**

Following the events of 2008, regulatory authorities recognised a need for a source of comprehensive and uniform data about the OTC derivatives markets. To this end, authorities have encouraged the establishment of TRs. As of the end of February 2011, global TRs have been established for credit, interest rate, and equity derivatives. The primary characteristics of these TRs are listed in Table 1. So far, no price, time stamp or master agreement data is contained within any of these global TRs.

**Table 1** Features of some Global TRs

Asset class	TR	Established/ Recognized	TR location/ regulator	Trade reporting and record keeping	Information reporting and/or availability
Interest rate	TriOptima	ISDA RFP process and launched in January 2010	Stockholm/ Swedish FSA	Data populated via monthly reporting by the G-14 dealers. <ol style="list-style-type: none"> <li>Portfolio information uploaded manually</li> <li>Trades are one-sided and not matched and records are not considered legally binding.</li> <li>Reports cleared and non-cleared transactions, although some data may be anonymised or not submitted</li> </ol>	Aggregated weekly data summarizing outstanding trade volumes, gross notional, currency breakdown and maturity profile by product type are available on the TriOptima website ( <a href="http://www.trioptima.com/repository/historical-reports.html">http://www.trioptima.com/repository/historical-reports.html</a> ).
Credit	Warehouse Trust	2006, but dealers committed to record trades in such TR in 2009	NY/ FRBNY and NYSBD69	<ol style="list-style-type: none"> <li>Maintains current contract details on the official legal (gold) record (cleared and non-cleared trade)</li> <li>Records single sided, non-legally binding (copper) records for reporting purposes</li> </ol>	<ol style="list-style-type: none"> <li>Provides weekly reports on current and historical data for direct download from the WT website (<a href="http://www.dtcc.com/products/derivserv/data/index.php">http://www.dtcc.com/products/derivserv/data/index.php</a>).</li> <li>Information on electronically confirmed and customized contracts can be provided upon request.</li> </ol>
Equity	Markit SERV	ISDA RFP process; launched in July 2010	London/ UK FSA	G-14 dealers currently report one-sided trade information to the repository on a monthly basis.	Currently provides information to regulators on notional value, number of open positions, currency and maturity.
Commodity	G-14 commodity dealers have partnered with the ISDA to build a TR in commodities. The goal was to develop an ISDA RFP by the third quarter of 2010, although this has been postponed.				
FX	Presently no operational global TR for OTC FX derivatives. CLS Bank issued a press release in October 2009 announcing the decision to extend its coverage as the trade data repository for the global FX market, ( <a href="http://www.cls-group.com/Media/Pages/NewsArticle.aspx?id=46">http://www.cls-group.com/Media/Pages/NewsArticle.aspx?id=46</a> ) However, market participants have not adopted the initiative yet.				



### 3 Regulatory reform towards TRs across the world

**Hong Kong** The Hong Kong (HK) Treasury Markets Association (TMA) has scheduled the launch of TR services under the Central Moneymarkets Unit in 2012. At the initial stage, the reporting requirement will be applied to Interest Rate Swaps (IRS) and Non-deliverable Forwards (NDF) only. Other OTC derivatives will be considered after the initial roll out. Industry consultation is underway for relevant supervisory requirements. The Securities and Futures Commission (SFC), TMA and the HK Government are working on regulatory regime which will require amendment of primary legislation (SFO) and introduction to new subsidiary legislation. <http://www.info.gov.hk/gia/general/201012/10/P201012100211.htm>

**Japan** In May 2010, the Japanese Diet passed a bill amending the Financial Instruments and Exchange Act. Under the new law, there will be a mandatory reporting requirement for financial institutions. For trades that are subject to mandatory CCP clearing, the CCP must store the trade information and report it to the regulator. Separately, financial institutions may either submit information to the designated TR (foreign or domestic), or to the regulator directly. Implementation of the amended law will take place by November 2012.

**Singapore** In May 2010 the Singapore Exchange Derivatives Clearing Limited (SGX-DC) ended a public consultation which sought comments on proposed amendments to the SGX-DC Clearing Rules that include the introduction of a new trade registration system for the registration of interest rate swaps and Asian foreign exchange forwards.

**European Union** The European Commission's proposal on market infrastructures (CCPs and trade repositories) was published in September 2010. The proposal requires that detailed information on OTC derivatives contracts entered into by EU financial and non-financial firms are reported to trade repositories and made accessible to supervisory authorities. In addition, it requires that trade repositories publish aggregate positions by class of derivatives. Changes to the Markets in Financial Instruments Directive (MiFID) are expected by spring 2011.

**United States** In July 2010, the US enacted the Wall Street Transparency and Accountability Act of 2010, which regulates the OTC derivatives market as part of comprehensive financial reform legislation (Dodd-Frank). Under Dodd-Frank, primary regulatory responsibility for OTC derivatives is shared between the Commodity Futures Trading Commission (CFTC) and Securities and Exchange Commission (SEC). Dodd-Frank requires that all swaps, both centrally and non-centrally cleared, be reported to Trade Repository. All swaps and security-based swaps must be reported to a data repository or, if no data repository will accept the transaction, to the CFTC or the SEC, respectively.(FSB, 2010)

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