

September 23, 2011

TO: Committee on Payment and Settlements Systems (CPSS)

Bank for International Settlements

4002 Basel Switzerland

TO: International Organization of Securities Commissions (IOSCO)

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Spain

## Consultative report on OTC derivatives data reporting and aggregation requirements

#### 1-INTRODUCTION

The International Swaps and Derivatives Association ("ISDA") welcomes this consultative report (CR). We fully support FSB Report Recommendation 19 on Trade Repositories ("TRs") and are very happy to assist CPSS and IOSCO in the delivery of an effective TR infrastructure and to help develop the building blocks for appropriate data aggregation. ISDA has worked with its members and with regulators to establish TRs for credit, interest rate and equity derivatives and industry efforts are continuing to establish TRs for commodities derivatives and foreign exchange contracts. In addition ISDA participates in the development of an LEI solution<sup>1</sup> and takes a leading role in the development of Unique Product Identifiers (UPI) and taxonomies for the classification of OTC derivatives<sup>2</sup>

ISDA appreciates the opportunity to respond to the CR, and is pleased that it sets out many familiar and well-founded positions and arguments. We also view very positively the fact that the CR reflects a high level of consistency with the terms of other commentaries and papers on this subject published by other public and regulatory bodies. In addition we very much welcome that the CR takes a global view of TRs, data reporting and aggregation, and hope that this will assist the fostering of consistency of standards internationally.

ISDA believes that fragmentation of TRs will introduce operational complexity, undermine risk reduction and impose unnecessary costs. We consider that the role of TRs in systemic oversight makes it essential that they are operationally robust, and that there is no fragmentation of their function, since this would undermine the whole objective of ensuring efficient aggregation of information. In any approach to TRs we believe that the solution needs to be global, utilised by all participants, fit for purpose and delivered in a phased approach, focusing on achievable goals.

http://www2.isda.org/attachment/MzQyMA==/ISDA%20UPI%20Implementation%20Plan%20Final.pdf

<sup>&</sup>lt;sup>1</sup> Requirements for a Global Legal Identifier (LEI) Solution: http://www.sifma.org/LEI-Industry-Requirements/

<sup>&</sup>lt;sup>2</sup> UPI and taxonomy implementation plan:

#### 2-RESPONSE

We have articulated our comments alongside the following sections;

- 1. **Access to TR data**. The provision to regulators globally of data via TRs should be reinforced by a regulatory framework, which ensures a respect for the security and coherence of this data.
- 2. **Global TR structure**. The mutual recognition of foreign jurisdictions should be reflected in national legislation. This will mitigate concerns about the availability of data to foreign regulators; develop global supervisory cooperation and a sounder, safer global regulatory infrastructure.
- 3. **Trade information.** We believe that the application of minimum data reporting requirements should be subject to rigorous cost/benefit analysis. Also a different approach should be applied to the data collection depending on whether the products are standardized and bespoke. Existing standards such as FpML should be leveraged.
- 4. **Exposure information.** The use of a single "Counterparty Exposure Repository" should be encouraged to provide for an aggregated risk view for regulators (the net mark-to-market exposure for each counterparty portfolio, the corresponding collateral and the firms' calculation of net exposure after the application of collateral).
- 5. **Legal agreements information.** The current agreements are very diverse and complex in nature. We encourage regulators to avoid replicating the complex and expensive infrastructure put in place by the various participants when this can be avoided. The ISDA Standard CSA initiative should be looked at as a use case that has the potential to very significantly improve the situation for both market participants and prudential regulators.
- 6. **Data aggregation**. Common industry standards should be encouraged in order to facilitate data aggregation and analysis by regulators for legal entities, products and for trade identifiers.

#### 1. Access to TR Data

We believe that the provision to global regulators of this data via TRs should be underpinned by a regulatory framework which ensures a respect for the security and coherence of this data. Issues that need to be considered in this context include; (1) Client Confidentiality (2) who should have access to the relevant information (type of authority, market participants, public etc); (3) safeguards regarding disclosure of data; and (4) confidentiality requirements when the data is received.

- 1.1 Client Confidentiality: We believe that it is important that dealers be protected from the potentially severe legal consequences of providing confidential client trade details to TRs arising from local data protection and client confidentiality laws. Obtaining the client's consent (which in many cases must be informed consent) can overcome this in most jurisdictions. However, ISDA's discussions with members indicate clearly that clients will be reluctant to give that consent. In particular, the ultimate clients of a fund manager will probably have stringent confidentiality requirements in their investment mandates that would prohibit such disclosure. Dealers may be under similar constraints vis-à-vis their own clients. The best solution is ultimately changing the relevant laws to permit disclosure in certain specified circumstances regardless of legal or contractual restrictions. EMIR includes such a provision. ISDA is working with supervisors to identify other jurisdictions where such legislative change should be prioritised.
- 1.2 Access: We believe that the disclosure of information by TRs to relevant regulators should be detailed and consistent. Data access and data usage must at all times meet local and global regulatory requirements. Our view is that only regulators which can demonstrate

they have a legitimate interest in the course of their supervision (required to exercise their functions) should be entitled to access this information from TRs. Additionally, regulators should not disclose any information received from any TR to any third party which is not itself a regulator. This will protect information that should be treated with a very high level of confidentiality. We believe that regulator access would be best handled by user access controls at the TR level as this approach would be transparent.

1.3 Safeguarding of data when disclosed is vital to the confidence of market participants, given the crucial role played by TRs. This implies certain requirements related to the ethics and conduct of TRs and their staff. We believe it advisable to establish policies and procedures to ensure that confidential information is not misused by the TR or its staff (e.g. information barriers to ensure that the affiliates of TRs do not have access to the confidential information). In addition to this, when disclosing confidential information to authorities, TRs should put in place a robust system of controls and safeguards (e.g. using encrypted formats) in order to protect data from loss and information leakage. We would similarly expect that a TR would indemnify market participants against any loss or legal liabilities that firms might suffer from as result of misconduct on the part of a TR or a breach of confidentiality obligations. Finally, TRs should be protected from any legal consequences (national law) should they disclose information required of them by relevant regulators.

1.4 We believe that *confidentiality* is the cornerstone of the data reporting system. It should therefore be expected that any relevant regulators seeking access to information from TRs should publicly commit themselves to following high standards, as well as to publishing information on the relevant legal framework regarding their confidential use of information. On the other hand, TRs should not be required to disclose information to authorities that have not publicly committed themselves to such standards. Additionally, we believe that any <u>public</u> reporting of market activity - aggregated or otherwise - should not cause inappropriate or commercially sensitive information to be disclosed, undermining the safe and effective performance of financial markets. In particular, if there is going to be public reporting of reported trades, every effort should be made by TRs to avoid impacting the reporting entity's ability to properly hedge itself for the reported trades in the market. Preferably, any public reporting should be made with sufficient time lag, so that the market participant involved will have sufficient time to properly hedge themselves in the market. Moreover, if the time delay for public reporting proposed by any TRs is not sufficient for certain large or more structured trades to be fully hedged, then certain exceptions should be granted to such trades, so that a longer time delay sufficient for proper hedging would be available. There needs to be further clarity around the type of data that is legally required for publication, and this data should only be published by those legally entitled to publish it.

### 2. Global TR Structure

Considering that TRs *operate globally*, the need for foreign jurisdictions' regulators to be mutually recognized should be sensitively reflected in national legislation. This international cooperation will mitigate concerns about the availability of data to foreign regulators (due to the unilateral actions of domestic authorities) and develop global supervisory cooperation (and a sounder, safer global regulatory infrastructure). We think that the role of TRs to facilitate regulators conduct of systematic oversight makes it essential that they are operationally robust but equally that there is no fragmentation of their function, since this would undermine the whole objective of ensuring efficient aggregation of information (duplication, imposing unnecessary cost and operational complexity and risk).

We are concerned that a shared, global regulatory aim – understanding how and where derivatives business may be creating systemic risk - underpinning efforts towards

establishment of an effective TR infrastructure, is being undermined, in many instances by the pursuit of local (national or regional) regulatory mandates.

We observe that in some instances, the reasons for this relate to systemic risk and regulatory control (regulators wishing to hold the relevant data in their jurisdiction). In others, this is for commercial reasons (promotion of the interests of a potential local TR service provider).

Against this backdrop and in order to avoid the above-mentioned harmful outcomes, our preference is for 'one TR per asset class' or ideally 'one TR for all asset classes'. We believe providing for the maximum possible concentration of data maximises the likelihood of regulators being able to access a comprehensible picture of systemic risk related to the OTC derivatives market.

If our vision of how the TR function should be structured is not to be realised, we believe that it is imperative that local regulators take responsibility and concerted steps to minimise the negative effect that fragmentation of the TR landscape will have on the risk picture regulators seek. These include:

- Avoiding national or regional rules insisting that reports of locally-designated derivatives transactions (on basis of e.g. currency, counterparty (or counterparties), underlying, reporting cycle frequencies, reporting fields and standards etc) be reported in local TRs. Regulators need to demonstrate flexibility when there is a cross-border element (in terms of currency, counterparty and underlying, etc.) present in the relevant transactions;
- TRs established in different jurisdictions should be local data repositories accepting a
  feed from one single authoritative global TR. This global TR should act as a routing
  engine to the local iterations and provide the relevant data set in line with those
  jurisdictional requirements. This will provide for standardisation of data fields and
  consistency in reporting for firms. It is anticipated that such global TR will accept
  incoming data in respect of clearing house members as well as execution and
  confirmation platform participants;
- If local TRs already in operation cannot be migrated to a single TR they should be mandated to make any required modifications to allow them to follow a global standard;
- Regulators should promote data-sharing between TRs to limit the burden on international trading where a firm may have obligations to report to multiple repositories.

We strongly agree with the need to provide regulators with trade data via TRs, (including client names, where we are legally able to do so) to enable them to develop a more complete view of OTC derivatives market activity and to enhance their ability to oversee the market and its participants. Relevant regulators should be able to assess the distribution of counterparty and market exposure across participants, aiding the timely detection of concentrated positions by any one participant and otherwise monitor or assess systemic risk.

#### 3. Trade Information

The terms of minimum data reporting requirements should be subject to rigorous cost/benefit analysis and while we are of the view that the provision of transaction data does make sense and is achievable with further development, we have concerns around how much "operational data" is being sought for non-electronic/cleared trades and the value of providing such information.

The CR makes reference in several of its developments to the specific challenges associated with complex and bespoke OTC derivatives. We respectfully suggest that it would be of particular value for the CR to explicitly recommend a distinct approach to data collection as it relates to the economic terms of standardized products on the one hand, and complex and bespoke products on the other. ISDA recommends that regulators adopt a 'generic' data representation for the latter, which provide summary electronic representation of the transaction economics while still equipping regulators with the appropriate set of information as it relates to counterparty and valuation information. Such approach has been successfully adopted at the marketplace level in the DTCC Trade Information Warehouse as part of its Copper Record, striking an effective balance between the need for an appropriate representation of the terms of the contract on one hand, and the economic reality and innovation cycle of those derivatives products on the other hand. The data representation should be tied in to existing data standards such as FpML in order to allow reuse of investment in this area and ongoing benefits in areas such as electronic processing.

We note that the CR calls for the reporting of amendments. The term "amendments" requires further definition. Furthermore we are unclear as to the benefit of reporting payment schedules, nor do we believe that there is any utility in reporting intragroup transactions. <sup>3</sup>

The FpML Standards Committee mandated the formation of the FpML reporting working group in early 2011 to support global regulatory requirements by ensuring that FpML can represent all required data elements to be reported to TRs, and by demonstrating how FpML can meet real-time reporting requirements.

The FpML process is open: working group participants include representatives from dealers, buy side, utilities, vendors and representatives from the regulatory community; and transparent: all e-mail communications and meeting notes are available on the working group distribution list.<sup>4</sup>

The current status of the regulatory reporting discussions is incorporated in the Last call working draft for FpML version 5.2<sup>5</sup>. We welcome further regulatory input into these discussions.

The Data Report notes the existence of other channels for reporting OTC derivatives data e.g. the TREM system in Europe and emphasizes the need to do both TR reporting while maintaining the alternative reporting. An evaluation of the alternative reporting systems, once TR reporting is in place should be considered, to rationalize the reporting streams where possible and simplify data aggregation.

We welcome, as stated page 12, the fact that the list of data fields provided e.g. in annex 2 is non- prescriptive. Defining the right set of fields for the different purposes is a tremendous challenge and as rightly stated, these fields might change over time.

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<sup>&</sup>lt;sup>3</sup> Joint Trade Association letter addressing the treatment of Inter Affiliate Transactions under Title VII of the Dodd-Frank Wall Street Reform and Consumer Protection Act, dated September 8, 2011 http://www2.isda.org/dodd-frank/

<sup>&</sup>lt;sup>4</sup> http://www.fpml.org/wgroup/index.html

<sup>&</sup>lt;sup>5</sup> www.fpml.org

#### 4. Exposure Information

We recommend that regulators focus on collecting exposure information from the respective participants, rather than aiming at computing valuation calculations themselves. This latter approach would indeed be of limited value for the standardized products, while it would face extremely difficult challenges for the more complex ones in terms of collection of data inputs and availability of appropriate valuation models.

The CR correctly identifies a gap in the TR reporting in that TRs were designed for transactional level reporting and not portfolio level reporting. While current exposure on an individual deal can be ascribed at the transaction level, exposure between entities can only be done at the portfolio level. The CR also correctly highlights that to understand exposure properly and to include collateral/credit support information this needs to be done across asset classes so across TRs. 'Legal Entity Identifiers' (LEIs) will facilitate the *direct* calculation of portfolio-level exposure (between pairs of counterparties), rather than having to build up this information by aggregating multiple transactions and across multiple TRs. We do not believe that the regulators should be looking to solve portfolio exposure reporting through aggregation, but instead, through a separate "Counterparty Exposure Repository".

The aggregation of individual transaction parameters to provide a view on exposure would require the collection and processing of an extensive amount of information from multiple sources at great cost. Alternatively, if each firm is to submit information to multiple TRs, then controls would need to be built to ensure that there is some commonality and consistency in the market parameters used in those submissions. Firms have already made significant investment in systems and legal opinions to capture information from master agreements, individual deals and market parameters in order to calculate exposure. Given the potential number of TRs, aggregation across TRs in a controlled manner would be a significant undertaking. For these reasons we advocate a single "Counterparty Exposure Repository" to provide for an aggregated risk view for the regulators. Instead of sending all the necessary pieces of information required to calculate current exposure, we propose that the macro risk picture between a firm and their counterparty can be represented as a single record (containing a few critical data points).

We propose that the Counterparty Exposure Repository, which is intended to have market coverage, would be in place of requiring valuation data or current exposure information on a transaction level. It is a computationally intensive and technically difficult task for each firm to compute the valuation each day for each transaction, all firms have invested significantly in the technology and staff to undertake this daily valuation, but it is still not a straightforward task. It is likely that regulators will need to make similar technology investments. Rather than the duplication of these measures, we suggest that a data feed of general transaction data, plus the submitting firm's computed valuation, should be sufficient for market surveillance use. We note also that the prudential regulators of the firms have the power to review firms' internal valuation models, which would provide assurance that the valuation results being provided to the Counterparty Exposure Repository are sound, they comply with the international guidelines included within Basel II and III, and would permit more in depth analysis of valuation methods and parameters if necessary.

We do believe that it would be useful for regulators to have oversight of the credit risk that exists at a portfolio level between pairs of market participants, particularly those that maybe considered systemically important. The Counterparty Exposure Repository could contain the net mark-to-market exposure for each counterparty portfolio and the corresponding collateral,

as well as the firms' calculation of net exposure after the application of collateral. We do not believe that having access to current exposure information on a trade by trade basis would support supervisors in monitoring and managing systemic risk since the risk is governed by portfolio based Master Agreements that provide for netting and credit support.

### 5. Legal Agreements Information

The CR points out that legal agreements have not been contemplated as part of TRs scope, and suggest that this constitutes a potential data gap.

Those legal agreements that govern the OTC derivatives marketplace are extremely complex and diverse in nature.

As already stated above, we recommend that whenever possible regulators make use of the infrastructure and capability already developed by market participants to compute and analyze their respective exposure. This is the case, for example, of the reporting of current exposure by participants. As stated above, this should be done at the portfolio level, which would allow the respective participants to apply their netting and collateral terms as appropriate. It would be excessively complex for regulators to try to replicate such infrastructure.

As it relates to conditional clauses, which can have systemic risk implications and be quite complex and disparate, we would like to point out that the Standard Credit Support Annex (Standard CSA) initiative currently in progress at ISDA constitutes a promising avenue for progress. The objective of this initiative is to put in place a CSA protocol that will have very standardized terms, and no conditional clause; we are also evaluating the possibility of having a native electronic representation of this document. If successful, we expect this initiative to provide significant benefits to marketplace participants (by creating a homogeneous valuation framework) as well as prudential regulators (by eliminating such conditional clauses).

### 6. Data Aggregation

We strongly advocate common industry standards to facilitate data aggregation and analysis by regulators for legal entities, products and for trade identifiers. To be useful for data aggregation, these standards should be unique and global in nature<sup>6</sup>.

#### 6.1 Legal Entity Identifier (LEI)

ISDA, as part of the global coalition of trade associations working on LEI, is in full support of a continued dialogue with the regulators worldwide to come to a global LEI solution, leveraging the LEI work done by the industry and we fully endorse the coalition's LEI response to the CR.

#### 6.2 Product Classification

ISDA supports the requirement for a standard product classification system for OTC derivatives for the purpose of supporting data aggregation and analysis by regulators. We however believe

<sup>&</sup>lt;sup>6</sup> For example, Unique Swap Identifiers as defined in 75 FR 76574 (Commodity Future Trading Commission proposed rulemaking that would establish unique identifier requirements) should be defined in line with and be reusable for a global Trade Identifier solution.

that the CR addresses two very different points as part of its recommendations, which should probably be better articulated distinctly.

### 6.2.1 Data representation for OTC derivatives

The CR states "(...)although there have been numerous efforts by industry to standardize the economic and legal terms and conditions that define different OTC derivative contracts, at present there are no universally-accepted industry standards for describing OTC derivative contracts and other financial instruments. (...) At best, standards covering particular types of financial products are available. One example of such a standard is the Classification of Financial Instruments ("CFI") code, established by International Organization for Standardization ("ISO") standard 10962, which —defines and describes codes for classifying different types of financial instruments." We respectfully suggest that industry standards such as FpML, and FIX correspond to universally accepted standards which aim at describing or transacting OTC derivatives contracts. As such, they address a scope which is distinct from a product classification standard, which the CFI and ISO standard mentioned here aim at addressing.

We share the analysis that "(...) currently not all OTC derivative products can be submitted to electronic trade confirmation systems and so be suitable to be represented by standard templates". As stated above, for the purpose of reporting to the TRs, ISDA recommended that regulators adopt the concept of generic data representation for the complex and bespoke OTC derivatives.

### 6.2.2 Product classification system

ISDA supports the CR recommendation that there is a need for a product classification for OTC derivatives, also known as product 'taxonomy', which needs to be organically integrated with the description of cash instruments.

To this effect, ISDA is in the process of finalizing the development of such a product classification.

Product specific working groups have developed the initial taxonomies which are at different stages of the sign off process for different asset classes. We will deliver the taxonomies for rates and credit first, followed by the taxonomies for equity, FX and commodities. An important part of the process is vetting by and receiving input from the broader market. Once finalized, we will publish the taxonomies together with the rules of operation to maintain the taxonomies. Discussions are ongoing as well regarding the integration of the taxonomies within FpML, as a further building block for the reporting; and with other standards organizations such as ISO.

For illustrative purposes, the current proposed taxonomies for credit derivatives and interest rate derivatives, which are still going through the industry vetting process and are subject to change, are attached in annex 1.

Once finalized, these product taxonomies will be integrated as part of the FpML standard, and the link to the cash instruments will then be done via the electronic representation of the economics of those OTC derivatives. As an example, regulators will then be able to review the actual bond issuances (the underlying cash instrument) associated to a set of debt option products (as an element of the derivative product classification) by accessing the underlyer FpML representations associated with such OTC contract.

### 6.2.3 Unique Product Identifiers

We support the CR suggestion to operate a clear distinction between a product classification on the one hand, and product identification for "uniform or standardized products" on the other. We also agree with the CR's assessment that the former should be a first priority.

We would like to take this opportunity to point out that ISDA is currently engaged into an analysis for specifying a solution for a Unique Product Identifier (UPI), as a way to support the requirement for a granular dissemination of data by the TRs in application to the Dodd-Frank Act.<sup>7</sup>

The below criteria have been put forward by the UPI Steering Committee for the evaluation of the final UPI solution.

Criteria for evaluation of UPI:

- a) Uniqueness- Approach will need to have an output that is unique and immutable.
- b) Asset-class consistency– Each asset class should follow a consistent approach.
- c) Granularity –UPIs must be granular enough to allow true, meaningful price comparison.
- d) Time to market– The time to deliver a workable solution is an important consideration.
- e) Scalability- Approach should be scalable to implement across products and asset classes.
- f) Market Standards UPI proposals should leverage open standards such as FpML.
- g) Universality– Proposals should be consistent globally, and designed to meet relevant known and reasonably anticipated regulatory requirements.
- h) Rapid Implementation UPI proposals should not deter or delay trading in and reporting of existing or new products.
- i) Workflow- UPI proposals should be able to be incorporated into existing workflows.
- j) Reversibility– A way of distributing the input attribution (product attributes) to the UPI.
- k) Interoperable- Approach will need to generate the same UPI based on the same inputs for different implementations (or participants).

#### 6.3 Trade Identifiers

ISDA strongly recommends the adoption of a "FirstTouch" approach for the generation of a unique Trade Identifier, which then can be used throughout the trade lifecycle by all parties involved. On a more technical level, as far as the format is concerned we recommend a flexible industry approach where each Trade Identifier generating party can adopt one of the following two methods:

i) Use of a Namespace plus a Unique ID; or

http://www2.isda.org/attachment/MzQyMA==/ISDA%20UPI%20Implementation%20Plan%20Final.pdf

<sup>&</sup>lt;sup>7</sup> ISDA UPI and taxonomy implementation plan:

- ii) A Global Unique ID which can take the form of either
  - a. GUID http://en.wikipedia.org/wiki/Globally\_unique\_identifier
  - b. UUID http://en.wikipedia.org/wiki/Universally\_Unique\_Identifier

We currently have a technical working group active with representation from all sectors of the industry. This group will provide an implementation analysis and plan. In addition a workflow working group has been formed to define cross asset class maintenance of Trade Identifier rules.

We hope that our response to this Consultation Report is helpful and we stand ready to provide IOSCO-CPSS with any further clarification or further information that it may find useful.

Yours Sincerely,

Robert Pickel

**Executive Vice Chairman** 

Soul G. Role

## Annex 1: credit and rates proposed taxonomy

# **Credit Taxonomy**

Base						
Product	Index	TRS	Index Tranche	Exotic	Single Name	Swaptions
	CDX		CDX	Corporate (ref ob only)	ABS	CDX
	LCDX		LCDX	Structured CDS	Corporate	Corporate
	CDX		CDX Structured Tranche		Loans	iTraxx
	MCDX		iTraxx		Muni	Muni
ţ	iTraxx		iTraxx Structured Tranche		Recovery CDS	Sovereign
9	ABX		ABX		Sovereign	Bespoke
Sub-product	CMBX					
Sut	IOS					
	MBX					
	PO					
	PrimeX					
	TRX					

# **Detailed Credit Taxonomy**

#	Asset Class	Base Product	Sub-Product	Transaction Type
1	Credit	Single Name	ABS	CDS on CDO
2	Credit	Single Name	Corporate	AsiaCorporate
3	Credit	Single Name	Corporate	AustraliaCorporate
4	Credit	Single Name	Corporate	EmergingEuropeanCorporate
5	Credit	Single Name	Corporate	Emerging European Corporate LPN
6	Credit	Single Name	Corporate	EuropeanCorporate
7	Credit	Single Name	Corporate	JapanCorporate
8	Credit	Single Name	Corporate	LatinAmericaCorporate
9	Credit	Single Name	Corporate	LatinAmericaCorporateBond
10	Credit	Single Name	Corporate	LatinAmericaCorporateBondOrLoan
11	Credit	Single Name	Corporate	NewZealandCorporate
12	Credit	Single Name	Corporate	NorthAmericanCorporate
13	Credit	Single Name	Corporate	SingaporeCorporate
14	Credit	Single Name	Corporate	StandardAsiaCorporate
15	Credit	Single Name	Corporate	StandardAustraliaCorporate
16	Credit	Single Name	Corporate	StandardEmergingEuropeanCorporate
17	Credit	Single Name	Corporate	StandardEmergingEuropeanCorporateLPN
18	Credit	Single Name	Corporate	StandardJapanCorporate
19	Credit	Single Name	Corporate	StandardLatinAmericaCorporateBond
20	Credit	Single Name	Corporate	StandardLatinAmericaCorporateBondOrLoan
21	Credit	Single Name	Corporate	StandardNewZealandCorporate
22	Credit	Single Name	Corporate	StandardNorthAmericanCorporate
23	Credit	Single Name	Corporate	StandardSingaporeCorporate
24	Credit	Single Name	Corporate	StandardSubordinatedEuropeanInsuranceCorporate
25	Credit	Single Name	Corporate	StandardSukukCorporate
26	Credit	Single Name	Corporate	SubordinatedEuropeanInsuranceCorporate
27	Credit	Single Name	Corporate	SukukCorporate
28	Credit	Single Name	Corporate	StandardWesternEuropeanCorporate
29	Credit	Single Name	Corporate	StandardEuropeanCorporate

#	Asset Class	Base Product	Sub-Product	Transaction Type
00	0 111	0: 1.11	000	5: 10
30	Credit	Single Name	Recovery CDS	Fixed Recovery Swaps
31	Credit	Single Name	Recovery CDS	Recovery Locks
32	Credit	Single Name	Loans	ELCDS
33	Credit	Single Name	Loans	LCDS
34	Credit	Single Name	Loans	StandardLCDSBullet
35	Credit	Single Name	Muni	USMunicipalFullFaithAndCredit
36	Credit	Single Name	Muni	USMunicipalGeneralFund
37	Credit	Single Name	Muni	USMunicipalRevenue
38	Credit	Single Name	Sovereign	AsiaSovereign
39	Credit	Single Name	Sovereign	AustraliaSovereign
40	Credit	Single Name	Sovereign	EmergingEuropeanAndMiddleEasternSovereign
41	Credit	Single Name	Sovereign	JapanSovereign
42	Credit	Single Name	Sovereign	LatinAmericaSovereign
43	Credit	Single Name	Sovereign	NewZealandSovereign
44	Credit	Single Name	Sovereign	SingaporeSovereign
45	Credit	Single Name	Sovereign	StandardAsiaSovereign
46	Credit	Single Name	Sovereign	Standard Australia Sovereign
47	Credit	Single Name	Sovereign	StandardEmergingEuropeanAndMiddleEasternSovereign
48	Credit	Single Name	Sovereign	StandardJapanSovereign
49	Credit	Single Name	Sovereign	StandardLatinAmericaSovereign
50	Credit	Single Name	Sovereign	StandardNewZealandSovereign
51	Credit	Single Name	Sovereign	StandardSingaporeSovereign
52	Credit	Single Name	Sovereign	StandardSukukSovereign
53	Credit	Single Name	Sovereign	StandardWesternEuropeanSovereign
54	Credit	Single Name	Sovereign	SukukSovereign
55	Credit	Single Name	Sovereign	WesternEuropeanSovereign
56	Credit	Single Name	ABS	CMBS
57	Credit	Single Name	ABS	EuropeanCMBS
58	Credit	Single Name	ABS	EuropeanRMBS
59	Credit	Single Name	ABS	RMBS

#	Asset Class	Base Product	Sub-Product	Transaction Type
60	Credit	Index Tranche	CDX	CDXEmergingMarketsDiversifiedTranche
61	Credit	Index Tranche	CDX	CDXTranche (HY)
62	Credit	Index Tranche	CDX	CDXTranche (IG)
63	Credit	Index Tranche	CDX	CDXTranche (XO)
64	Credit	Index Tranche	CDX	StandardCDXTranche (HY)
65	Credit	Index Tranche	CDX	StandardCDXTranche (IG)
66	Credit	Index Tranche	LCDX	LCDXTranche
67	Credit	Index Tranche	LCDX	StandardLCDXBulletTranche
68	Credit	Index Tranche	CDX Structured Tranche	CDX Blended Tranche
69	Credit	Index Tranche	CDX Structured Tranche	CDX Risky Zero Tranche
70	Credit	Index Tranche	iTraxx	iTraxxAsiaExJapanTranche
71	Credit	Index Tranche	iTraxx	iTraxxAustraliaTranche
72	Credit	Index Tranche	iTraxx	iTraxxEuropeTranche
73	Credit	Index Tranche	iTraxx	iTraxxJapanTranche
74	Credit	Index Tranche	iTraxx	StandardiTraxxEuropeTranche
75	Credit	Index Tranche	iTraxx Structured Tranche	iTraxx Blended Tranche
76	Credit	Index Tranche	iTraxx Structured Tranche	iTraxx Risky Zero Tranche
77	Credit	Index Tranche	ABX	ABXTranche
78	Credit	Index	CDX	CDX.HY
79	Credit	Index	CDX	CDX.IG
80	Credit	Index	CDX	CDX.XO
81	Credit	Index	CDX	CDXEmergingMarkets
82	Credit	Index	CDX	CDXEmergingMarketsDiversified
83	Credit	Index	LCDX	LCDX
84	Credit	Index	CDX	StandardLCDXBullet
85	Credit	Index	MCDX	MCDX

#	Asset Class	Base Product	Sub-Product	Transaction Type
86	Credit	Index	iTraxx	iTraxxAsiaExJapan
87	Credit	Index	iTraxx	iTraxxAustralia
88	Credit	Index	iTraxx	iTraxxEurope
89	Credit	Index	iTraxx	iTraxxJapan
90	Credit	Index	iTraxx	iTraxxLevX
91	Credit	Index	iTraxx	iTraxxSovX
92	Credit	Index	iTraxx	Itraxx SDI
93	Credit	Index	ABX	ABX.HE
94	Credit	Index	CMBX	CMBX
95	Credit	Index	IOS	IOS
96	Credit	Index	MBX	MBX
97	Credit	Index	PO	PO
98	Credit	Index	PrimeX	PrimeX
99	Credit	Index	TRX	TRX
100	Credit	Total Return Swap	N/A	N/A
101	Credit	Swaptions	iTraxx	iTraxxAsiaExJapanSwaption (iTraxxAsiaExJapan underlyer)
102	Credit	Swaptions	iTraxx	iTraxxAustraliaSwaption (iTraxxAustrailia underlyer)
103	Credit	Swaptions	iTraxx	iTraxxJapanSwaption (iTraxxJapan underlyer)
104	Credit	Swaptions	iTraxx	iTraxxSovXSwaption (iTraxxSovX underlyer)
105	Credit	Swaptions	Muni	CDSSwaption
106	Credit	Swaptions	CDX	CDXSwaption
107	Credit	Swaptions	iTraxx	iTraxxEuropeSwaption
108	Credit	Swaptions	Sovereign	CDSSwaption
109	Credit	Swaptions	Corporate	CDSSwaption
110	Credit	Exotic	Corporate	Ref ob only
111	Credit	Exotic	Structured CDS	Contingent CDS
112	Credit	Exotic	Structured CDS	First to Default / Nth to Default
113	Credit	Exotic	Structured CDS	Long form Bespoke
114	Credit	Exotic	Structured CDS	Standard Terms Bespoke

## **Rates Taxonomy**

Base Product	IR Swap	FRA	Cap/Floor	Cross Currency	Options	Exotic
	Fixed - Float	1		Basis (float- float)	Debt Options	
	Fixed - Fixed	1		Fixed - Float	Swaption	
	Basis (float-float)	1		Fixed - Fixed		
Ħ	Inflation					
ğ	OIS					
Sub-product						

## **Detailed Rates Taxonomy**

#	Asset Class	s Base Product	Sub-Product
1	Rates	IR Swap	Fixed - Float
2	Rates	IR Swap	Fixed-Fixed
3	Rates	IR Swap	Basis
4	Rates	IR Swap	Inflation
5	Rates	IR Swap	OIS
6	Rates	FRA	
7	Rates	Cap/Floor	
8	Rates	Cross Currency	Basis
9	Rates	Cross Currency	Fixed - Float
10	Rates	Cross Currency	Fixed - Fixed
11	Rates	Options	Debt options
12	Rates	Options	Swaption
13	Rates	Exotic	