FSB FINANCIAL STABILITY BOARD

# Consultative Document

## Standards and Processes for Global Securities Financing Data Collection and Aggregation

**13 November 2014**

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# 1. Introduction

On 29 August 2013, the FSB published the report *Policy Framework for Addressing Shadow Banking Risks in Securities Lending and Repos* (hereafter August 2013 Report) that set out final recommendations to address financial stability risks in relation to securities lending and repos.[1] These included recommendations for national/regional authorities to improve data collection on securities lending and repo markets to detect financial stability risks and develop policy responses, and for the FSB to aggregate the total national/regional data for these markets in order to assess global trends in financial stability (Annex 1).

Based on these recommendations, a FSB Data Experts Group (hereafter DEG) was established to develop standards and processes for global data collection and aggregation on securities financing transactions that are relevant for financial stability monitoring and policy responses. Such standards and processes would allow the FSB to collect periodically (at least monthly) from national/regional authorities aggregated data on securities lending and repos, based on granular information collected at the national/regional level. The recommendations for data collection procedures used by national/regional authorities should help to minimise potential problems in global aggregates, including double-counting.[2] The aggregated national/regional data submitted to the FSB should exclude central bank repo transactions.

This document sets out the proposed standards and processes for global securities financing data collection and aggregation. It includes proposals on *data elements* for repos, securities lending and margin lending that national/regional authorities will be asked to report as aggregates to the FSB for financial stability purposes in Section 2. The document then describes the *data architecture* issues related to the data collection and transmission from the reporting entity to the national/regional authority (first tier) and then from the national/regional to the global level (second tier), to ensure the quality of global aggregates and the efficiency of the reporting framework in Section 3. Six *recommendations* to national/regional authorities are set out in Section 4 to ensure consistency among national/regional data collections and to derive meaningful global aggregates. Section 5 discusses the potential *uses of the aggregated data* (in particular those data elements not covered in the August 2013 Report). The *next steps* for the completion of the initiative are outlined in Section 6, including plans to follow up on the proposals set out in this document with an evaluation of potentially expanding the data collection to include economically equivalent operations and additional data for financial stability purposes. These additional data elements could also include those that are needed to measure collateral velocity - leveraging on the FSB work on the possible harmonisation of regulatory approaches to re-

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1 http://www.financialstabilityboard.org/wp-content/uploads/r_130829b.pdf

2 Double-counting occurs when both parties involved in a contract may provide the data. In the case of securities financing transactions, this means that the same transaction may be reported twice, by both the lender and the borrower, leading to an overestimation of the size of the overall securities financing market. Therefore it is necessary to make adjustments to remove double-counting, in order to derive appropriate measures (see Section 3.3 for details).

hypothecation of client assets - and to monitor the implementation of the new regulatory framework for haircuts on non-centrally cleared securities financing transactions.[3]

The proposals in this document have been developed by the DEG and were discussed in meetings with market participants. The FSB wishes to thank those who have taken the time and effort to share their views.

The DEG has also leveraged other initiatives such as the FSB definition of a common data template for global systemically important banks (G-SIBs).[4] The collection of data on securities financing transactions is also a component of the implementation of the G20 Data Gaps Initiative Recommendation 4 on the development of measures of system-wide macro-prudential risk such as the aggregate leverage and maturity mismatches in the financial system.[5] Where possible, duplications among similar international data collections have been avoided.

The FSB welcomes comments on the proposals set out in this document. Comments and responses to questions should be submitted by **12 February 2015** by email to fsb@bis.org or by post (Secretariat of the Financial Stability Board, c/o Bank for International Settlements, CH-4002, Basel, Switzerland). All comments will be published on the FSB website unless a commenter specifically requests confidential treatment.

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[3] http://www.financialstabilityboard.org/wp-content/uploads/r_141013a.pdf

[4] This initiative is developing a common data template to collect from G-SIBs data relevant for financial stability analyses. Partial data on securities financing transactions are currently collected to assess major bilateral linkages between large international financial institutions as well as their common exposures and funding dependencies to countries, sectors and financial instruments. Given the high confidentiality of such bilateral information, a framework for pooling and sharing relevant data among supervisors and central banks with macro-prudential mandates has been established (see http://www.financialstabilityboard.org/wp-content/uploads/r_120328l1.pdf and the latest progress report at http://www.financialstabilityboard.org/wp-content/uploads/r_140506.pdf).

[5] See the FSB – IMF report on "The Financial Crisis and Information Gaps" (October 2009; http://www.financialstabilityboard.org/wp-content/uploads/r_091029.pdf). Annual progress reports on the implementation of the 20 recommendations have been issued since 2010 (http://www.financialstabilityboard.org/wp-content/uploads/r_140923.pdf for 2014).

# 2. Data elements and granularity

## 2.1. Data elements for financial stability

The first step in creating standards and processes for global data collection and aggregation of securities financing transactions is the identification of data elements and the definition of a minimum granularity necessary to create the meaningful global aggregates to inform authorities in their financial stability monitoring and policy responses. With regard to repos and securities lending operations, the August 2013 Report identified an initial list of key data elements. The DEG started with this list of data elements (see Table 1 below) and identified additional elements that are also relevant for financial stability purposes (see Sections 2.2.1 and 2.2.2 for the full list of data elements for repos and securities lending and Section 2.2.3 for additional tables for margin lending).

**Table 1 – Data on securities financing transactions identified in the August 2013 Report to be useful for financial stability monitoring and policy responses**

| Repo | Securities Lending |
|---|---|
| Value date | Value date |
| Maturity date | Maturity date |
| Collateral type | Collateral type |
| Collateral quality | Collateral quality |
| Haircut | Haircut |
| Principal Amount | Amount of security lent |
| Counterparty type | Counterparty (Borrower) type |
| (Repo) Market segment (bilateral, tri-party or CCP-cleared) | Beneficial owner (Security lender) type |
| Repo Rate | Type of security lent |
| Cash currency | Cash collateral reinvestment – Asset type |
| Collateral currency | Cash collateral reinvestment – Maturity |

The final list of data elements will be based on and complemented by a comprehensive dictionary of data definitions (metadata) and reporting guidelines to ensure effective and consistent global aggregation. In addition to (i) the set of data elements for global aggregation purposes, the DEG also agreed on recommendations for (ii) reference periods or dates (see "2.1 Reporting period" in Table 2 and "3.1 Reference date" in Table 3 below) as well as (iii) reporting frequency and timeliness (see recommendation (ii) in Section 4).

The tables below describe the common definitions and minimum granularity of data elements that authorities are requested to use in their data collections in order to ensure a consistent aggregation of the data on securities financing reported to the FSB. As stated in the August 2013 Report, national/regional authorities should collect the needed data, based on a

consideration of their market structure, and building upon existing data collection processes and market infrastructure where appropriate. Thus, the proposed data elements are not intended to restrain national/regional authorities from collecting additional data elements or adopting higher frequency or higher level of detail, provided that the data collected are consistent with the proposed FSB definitions (see Section 2), processes (see Section 3) and recommendations (see Section 4) so that it is possible to create meaningful global aggregates for financial stability purposes (see Section 5).

## 2.2. Definitions of data elements

The creation of comparable global aggregates requires that data be collected using consistent taxonomies and common definitions.

Common definitions of securities financing transactions such as repo, securities lending and margin lending are needed to ensure that the vast majority of these transactions are captured, irrespective of the local trading practices (for example, where repos are executed as buy/sell backs), and without introducing errors due to inconsistencies in the way data are reported by different jurisdictions. Such common definitions should also reduce the risk of incentivising market participants to carry out securities financing transactions under a different legal or contractual form to avoid or circumvent the reporting obligation.

The global data collection could be based on the aggregation of reporting from either one or both parties to a trade (e.g. repos and reverse repos or securities lent and borrowed). Assuming that at least FSB member jurisdictions will provide the data, a two-side reporting scheme, where both counterparties report the trade, would maximise the data collection coverage.[6] For example, a one-sided reporting scheme for repos would not capture a reverse repo between a reporting entity and a non-reporting counterparty. With two-side reporting, only transactions where both counterparties are non-reporters would not be included in the global aggregates. However, collecting data from both parties of securities financing contracts introduces double-counting as data from the same transaction could be reported twice (See Section 3.3).

Transactions executed with central banks are excluded from the data reporting scope as well as internal deals within the same legal entity. Intra-group transactions between different legal entities (banks or other subsidiaries) should be included.

### *2.2.1 Repurchase agreement and sell/buy back operations*

A *repurchase agreement* (*repo)* is an arrangement involving the provision of securities or other financial assets ("collateral") in exchange for cash (spot leg) with a commitment to repurchase the same or similar collateral at a fixed price (forward leg) either on a specified

[6] The two-sided approach is suggested for stock data on repos and securities lending. Reverse repos' flow data are based on a one-sided reporting scheme since they are meant to look at the turnover of credit exposures so that only the cash leg is required. Also, data for margin lending would be based on one-side reporting because of the characteristics of these transactions and the nature of the intermediary-client relationship.

future date or on demand ("open" or extendable repos).[7] A *repo* is viewed from the perspective of the provider of the collateral - i.e. the cash taker. The transaction is called a *reverse repo* when viewed from the perspective of the buyer of collateral and cash provider.

Repos include not only classic repos, but also sell/buy back transactions. In the case of classic repos, the spot and forward legs are always governed by a single contract which allows for the payment of variation margins and the right of substitution of the collateral during the term of the repo. Sell/buy backs are economically similar transactions but governed by two legally independent contracts for the spot and the forward legs, which makes it difficult to legally enforce margin calls and exercise the right of substitution of the collateral.[8] However, as with classic repos, sell/buy backs can also be governed by a single agreement ("documented sell/buy backs") that allow for variation margins and right of substitution.[9]

Table 2 lists the recommended data elements that should be reported for reverse repos and buy/sell back transactions (hereafter collectively referred as "reverse repos"). Tables 3 and 4 list, in addition to those for reverse repos, the recommended data elements for repos and sell/buy back transactions (hereafter "repos").

Repos include but are not limited to contracts conducted under the following master agreements: Master Repurchase Agreement (MRA), Global Master Repurchase Agreement (GMRA), Deutscher Rahmenvertrag für Wertpapierpensionsgeschäfte, China Bond Repurchase Master Agreement, Korea Financial Investment Association (KOFIA) Standard Repurchase Agreement, Investment Industry Regulatory Organization of Canada (IIROC) Repurchase/Reverse Repurchase Transaction Agreement, Convention-Cadre Relative aux Operations de Pensions Livrees, Saiken Tou no Gensaki Torihiki ni Kansuru Kihon Keiyaku Sho, Contrato Marco de compraventa y Reporto de valores, Clearing House Rules (for example, Fixed Income Clearing Corporation - FICC), bespoke repo agreements.

Based on the August 2013 Report, the FSB recommends that national/regional authority report two sets of data for global aggregation:

(i) **Flow data** (as transactions settled over a certain period of time) would be collected and reported to the FSB, but limited to (i) the number, (ii) principal amount, (iii) currency and (iv) maturity of trades whose spot leg has been settled during the reporting period.[10] By

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[7] "Open" maturity is where both parties agree daily either to renew or terminate the agreement. Such an arrangement avoids settlement costs if both parties wish to roll-over the repo on a continuing basis.

[8] While the different legal nature of the contracts also implies operational differences in the way classic repos and sell/buy back operations are conducted (e.g. on the payment of repo interest and the coupon or dividend on the collateral), there is no significant economic difference between these transaction types.

[9] Specifically, the parties agree on an "early close-out" clause, which allows them to terminate the original sell/buy back and initiate a new one for the remaining term to maturity and with the adjusted amount of cash or collateral.

[10] Specific guidance will be provided on how modified or novated contracts should be included in flow data. One approach is that modified or novated trades should be reported as only one transaction to avoid an increase in centrally cleared transactions resulting in an increase in the reported global flow data. Also, flow data should include rolled-over OTC repos, when counterparties decide to skip the settlement of the forward leg of the first repo and of the cash leg of the second repo.

design, it is not possible to link flow data with variations in position/stock data. For flow data, the collection and aggregation of only the reverse repo cash leg is recommended;

(ii) **Position/stock data** (outstanding balance of all transactions measured at a given point in time), represented by the total gross amount of loans (cash leg) received for repo or provided for reverse repo, aggregated according to the required classification (e.g. underlying collateral types, counterparties). The collection and aggregation of position/stock data includes separate reporting of both legs of the securities financing transactions.

The Tables 2 to 4 below define the proposed data elements and describe the reporting of aggregated data to the FSB. The stock/position data is separated into data elements related to the loan in Table 3 and related to the collateral in Table 4. The loan and collateral data are linked by the classification of the contract (type and market segment) and the counterparty (sector and jurisdiction). Separating the collateral related data elements from the loan related data elements will facilitate the reporting of collateral pools for repos managed at portfolio level.

At the national/regional level – where confidentiality issues are addressed by prudential or other regulations – the data collection could be more detailed, with additional information useful to conduct more comprehensive analysis on individual counterparties, markets or instruments.

Specific guidance will be provided for particular cases such as callable bonds, tri-party substitutions and other forms of collateral turnover.

**Table 2: Data elements related to *reverse repos* – loans flow data**

| | Element | Definitions |
|---|---|---|
| 2.1. | Reporting period | The month of the settled transactions. |
| 2.2. | Number of trades settled (spot leg) during the reporting period | The number of trades with spot leg settled in the reporting period.<br>The spot leg is the first part of the reverse repo and buy/sell back, where the buyer provides cash to the seller of securities. |
| 2.3. | Original maturity | Maturity buckets of trades with spot leg settled in the period (in calendar days), according to:<br>• Open or continuing terms contracts for which no maturity date is specified<br>• Overnight, including 1-day term trades or longer that mature the next day<br>• from 2 days to 1 month<br>• more than 1 month up to 3 months<br>• more than 3 months and up to 1 year<br>• more than 1 year |
| 2.4. | Currency | Proposed list of major currencies:[11]<br>• BRL – Brazilian Real<br>• CAD – Canadian Dollar<br>• CHF – Swiss Franc<br>• CNY - Renminbi<br>• DKK – Danish Krona<br>• EUR – Euro<br>• GBP – UK Pound<br>• JPY – Japanese Yen<br>• SAR – Saudi Arabian Riyal<br>• USD – US Dollar<br>• Other currencies<br>Specific guidance will be provided for cross-currency trades. |
| 2.5. | Principal amount | The actual amount of cash provided for trades with spot leg settled in the reporting period, in millions of USD.[12] |

[11] An alternative is to include a full list of currencies and require the principal amount be in units of the currency of denomination so that the global aggregator is able to convert in USD.

[12] At the national/regional level, the principal amount may be reported in the currency of denomination, in which case the conversion in USD could be done by the authority in charge of the collection.

**Table 3: Data elements related to *reverse repos* and *repos* – loans stock data**

| | Element | Definitions |
|---|---|---|
| 3.1. | Reference date | End-of-month date at which the snapshot of outstanding transactions is reported to the FSB. |
| 3.2. | Type of contract | • Repo and sell/buy back operations<br>• Reverse repo and buy/sell back operations<br>whose spot leg date is equal or earlier than the reference date and whose off-leg date is later than the reference date. |
| 3.3. | Sector of the reporting entity | The reporting entity is the cash taker for repo or sell/buy back operations and the cash provider for reverse repo or buy/sell back operations.<br>The sector classification should be based on the System of National Accounts definitions and consistent with other FSB initiatives (e.g. the GSIBs common data template). The following classification is proposed:<br>• Banks (SNA: deposit-taking corporations)<br>• Broker-dealers and investment firms<br>• MMFs<br>• ETFs<br>• REITs<br>• Other investment funds<br>• Other financial corporations[13] excluding CCPs<br>• CCPs<br>• Insurance/re-insurance corporations[14]<br>• Pension Funds<br>• General government (transactions with central banks are excluded)<br>• Non-financial corporations (including public non-financial corporations, large corporate and small-medium enterprises) and other sectors |
| 3.4. | Market segment – trading | Transactions traded:<br>• on a pure principal-to-principal basis or<br>• with the intermediation of an agent |

[13] Including financial corporations engaged in the securitisation of assets, security and derivative dealers operating on their own account, financial corporations engaged in lending (e.g. financial leasing, personal or commercial finance), specialised financial corporations that provide short-term financing for corporate mergers and takeovers, export/import finance, factoring services, venture capital and development capital firms.

[14] The classification of insurance companies may be revised in the implementation of the FSB framework of numerical haircut floors.

| | Element | Definitions |
|---|---|---|
| 3.5. | Market segment – clearing | Transactions:<br>• cleared or<br>• not cleared |
| 3.6. | Counterparty sector | See "3.3 Sector of the reporting entity" for the classification<br>For transactions cleared via a CCP, the sector "CCPs" should be selected.<br>Counterparties could also be split into reporting and non-reporting (See Section 3.1.2 and 3.3). |
| 3.7. | Counterparty jurisdiction | All counterparty jurisdictions should be reported (materiality thresholds could apply).<br>In case of CCP cleared repos, the jurisdiction of the CCP should be reported. |
| 3.8. | Residual maturity | See "2.3 Original maturity" in Table 2.<br>For "evergreen" contracts, the residual maturity is based on the minimum notice period.<br>For repos with a put, maturity is based on the first day the put can be exercised. |
| 3.9. | Repo rate | The repo rate is explicitly set and separately paid in a classic repo while, in jurisdictions where repo is carried out as sell-buy back, the rate is implicit in the difference between the forward price (including repo interest) and the spot price.<br>To be reported according to buckets to be decided. As a starting point, 0.5% increments could be considered, with the final calibration of buckets according to the results of a pilot exercise.<br>Specific guidance will also be provided for rates of operations cleared via a CCP. |
| 3.10. | Cash currency | See "2.4 Currency" in Table 2. |
| 3.11. | Principal amount | The amount of cash provided (reverse repo) or received (repo) in millions of USD, on a gross basis. |

**Table 4: Data elements related to *reverse repos* and *repos* – collateral stock data**[15]

| | Element | Definitions |
|---|---|---|
| 4.1. | Reference date | See "3.1 Reference date" in Table 3. |
| 4.2. | Type of contract | See "3.2 Type of contract" in Table 3. |
| 4.3. | Sector of the reporting entity | See "3.3 Sector of the reporting entity" in Table 3. |
| 4.4. | Market segment – clearing | See "3.5 Market segment - clearing" in Table 3. |
| 4.5. | Collateral management | Collateral for transactions managed<br>• by a tri-party agent or<br>• bilaterally |
| 4.6. | Counterparty sector | See "3.6 Counterparty sector" in Table 3. |
| 4.7. | Counterparty jurisdiction | See "3.7 Counterparty jurisdiction" in Table 3. |
| 4.8. | Collateral type | The collateral actually allocated at the reference date should be classified into the following collateral types:<br>• Cash collateral<br>• Government securities (including other sovereign, municipal and regional bonds)[16]<br>• Supra-nationals and agencies securities[17]<br>• Debt securities issued by banks and other financial institutions<br>• Corporate debt securities issued by non-financial institutions<br>• Securitised products<br>• Main index equities (including convertible bonds)<br>• Other equities (including convertible bonds)<br>• Other assets (including shares in mutual funds and debt-equity hybrid securities) |
| 4.9. | Collateral quality | Debt securities should be split into:<br>• Investment grade[18]<br>• Non-investment grade<br>• Non-rated |

[15] CCPs' initial and variation margining requirements should not be included.

[16] This includes government-sponsored securitisation where they benefit from an explicit government guarantee.

[17] This includes agency-sponsored securitisation where they benefit from an explicit agency guarantee.

[18] According to external ratings, i.e. securities rated Baa or higher by Moody's and BBB or higher by Standard and Poor's.

<table>
<tr><th></th><th>Element</th><th>Definitions</th></tr>
<tr><td>4.10.</td><td>Collateral currency</td><td>Currency of denomination of collateral assets.<br>See “2.4 Currency” in Table 2.</td></tr>
<tr><td>4.11.</td><td>Collateral residual maturity</td><td>Non-cash collateral other than equities should be classified into the following maturity buckets:<ul><li>below 1 month</li><li>more than 1 month and up to 3 months</li><li>more than 3 months and up to 1 year</li><li>more than 1 year and up to 5 years</li><li>more than 5 and up to 10 years</li><li>more than 10 year</li></ul></td></tr>
<tr><td>4.12.</td><td>Jurisdiction of the issuer of the underlying security</td><td>See “3.7 Counterparty jurisdiction” in Table 3.<br>In case of securities issued by a foreign subsidiary, the jurisdiction of the ultimate parent company is preferred, but the jurisdiction of the subsidiary could be reported in case of difficulties to identify the ultimate parent.</td></tr>
<tr><td>4.13.</td><td>Haircut</td><td>Report actual haircut (cash investor margin levels) on non-centrally cleared transactions, according to the following buckets (in percentage): [19]<table><tr><th>Corporate and other issuers, including government securities</th><th>Securitised products, equities and other assets</th></tr><tr><td>0</td><td>0</td></tr><tr><td>> 0 and <= 0.5</td><td rowspan="2">> 0 and <= 1</td></tr><tr><td>> 0.5 and <= 1.5</td></tr><tr><td>> 1.5 and <= 3</td><td rowspan="2">> 1 and <= 4</td></tr><tr><td>> 3 and <= 4</td></tr><tr><td>> 4 and <= 6</td><td>> 4 and <= 6</td></tr><tr><td rowspan="2">> 6 and <= 10</td><td>> 6 and <= 7</td></tr><tr><td>> 7 and <= 10</td></tr><tr><td>> 10 and <= 15</td><td>> 10 and <= 15</td></tr><tr><td>> 15 and <= 25</td><td>> 15 and <= 25</td></tr><tr><td>> 25</td><td>> 25</td></tr></table></td></tr>
</table>

[19] The buckets are consistent with Table 1 in the FSB Regulatory framework for haircuts on non-centrally cleared securities financing transactions (http://www.financialstabilityboard.org/wp-content/uploads/r_141013a.pdf).

| | Element | Definitions |
|---|---|---|
| 4.14. | Re-use | Total market value of collateral pledged by the lender to the borrower that has been re-used. |
| 4.15. | Collateral market value | Gross market value of the collateral in millions of USD. |

***Consultative questions (please provide any available evidence to support your response, including data, studies or other documentation as necessary)***

***Q2-1. Does the proposed definition of repos provide a practical basis for the collection of comparable data across jurisdictions as well as the production of comprehensive and meaningful global aggregates?***

***Q2-2. In a later stage, a list of transactions that are economically equivalent to repos may be added to the reporting framework (see also Section 6 for details). Which economically equivalent transactions would you suggest for future inclusion? Please provide a definition of such transactions and explain the rationale for inclusion.***

***Q2-3. Are the proposed definitions and level of granularity of the data elements described in Tables 2 to 4 appropriate for a consistent collection of data on repo markets at the national/regional level and for aggregation at the global level? In particular, are the detailed breakdown of major currencies (in Table 2), sector of the reporting entity and counterparty as well as bucketing for repo rate (in Table 3), collateral residual maturity, haircut and collateral type (in Table 4) appropriate? If not, please specify which definitions or classifications of data element(s) require modification, why the modification is necessary, and the alternative definitions/classifications.***

***Q2-4. Do you see any practical difficulties in reporting the total market value of collateral that has been re-used? Do you have any suggestion for addressing such difficulties?***

***Q2-5. Do the classifications provided for "market segment – trading" (in Table 3) and "market segment – clearing" (in Table 3 and 4) appropriately reflect relevant structural features of the repo markets? Are there additional structural features of repo markets that should be considered?***

***Q2-6. Are there additional repo data elements that should be included in the FSB global securities financing data collection and aggregation for financial stability purposes? Please describe such additional data elements, providing definitions and the rationale for their inclusion.***

### *2.2.2 Securities lending and borrowing*

Securities lending refers to a transaction where an entity (lender) lends specific securities to a counterparty (borrower), with an agreement to terminate the loan at a fixed date or on demand of the lender or the borrower, returning the same or equivalent securities. In exchange for the securities, the borrower provides collateral, usually in the form of cash or non-cash collateral. The collateral may be of equal value to the securities lent, or, more frequently, of greater value, depending on the applied margin or haircut. In addition, there is usually a fee paid by the borrower to the lender. Frequently, custodian banks operate securities lending programs on behalf of their customers ("beneficial owners"), although non-custodian banks are often active securities lending agents as well.

Securities lending transactions include but are not limited to contracts conducted under the following master agreements: Master Securities Loan Agreement (MSLA), Global Master Securities Lending Agreement (GMSLA), Overseas Securities Lending Agreement (OSLA), Master Equity and Fixed Interest Stock Lending Agreement (MEFISLA), Gilt Edged Stock Lending Agreement (GESLA), Korean Securities Lending Agreement (KOSLA), Deutscher Rahmenvertrag für Wertpapierdarlehen, Australian Masters Securities Lending Agreement (AMSLA), Japanese Stock Lending Agreement, Clearing House Rules, Bespoke securities lending agreements.[20] Repo-like transactions traded under the GMSLA should be reported as securities lending transactions.

Table 5 and 6 define the proposed securities lending data elements, with separate tables for the loans and for the collateral. The two tables are linked by the classification of the contract (type and market segment) and the counterparty (sector and jurisdiction). Separating the collateral related data elements from the loan related data elements will facilitate the reporting of collateral pools that are linked to a portfolio of securities loans.

[20] Securities lending provided by a Central Securities Depository (CSD) as a principal for settlement enhancing services to prevent or resolve failures should also be included.

**Table 5: Data elements related to *securities lending* and *borrowing* – loan stock data**

| | Element | Definitions |
|---|---|---|
| 5.1. | Reference date | See "3.1 Reference date" in Table 3. |
| 5.2. | Position | • Securities lending<br>• Securities borrowing<br>including all open positions as of the reference date. |
| 5.3. | Sector of the reporting entity | See "3.3 Sector of the reporting entity" in Table 3.<br>The reporting entity is the lender in case of securities lending and the borrower in case of securities borrowing. |
| 5.4. | Market segment – trading | See "3.4 Market segment - trading" in Table 3. |
| 5.5. | Market segment – clearing | See "3.5 Market segment - clearing" in Table 3. |
| 5.6. | Counterparty sector | See "3.6 Counterparty sector" in Table 3. |
| 5.7. | Counterparty jurisdiction | See "3.7 Counterparty jurisdiction" in Table 3. |
| 5.8. | Type of security lent or borrowed | Asset class as categorised in element "4.7 Collateral type" of Table 4. |
| 5.9. | Residual maturity | See "2.3 Original maturity" in Table 2.<br>Calculated with reference to the maturity date of the securities loan. |
| 5.10. | Currency | See "2.4 Currency" in Table 2. |
| 5.11. | Securities lending fee (*if collateral is non-cash*) or rebate rate (*if collateral is cash*) | Securities lending fee: fee that the borrower of the security pays to the lender.<br>Rebate rate: the interest rate (cash reinvestment rate minus securities lending fee) paid by the lender of the security to the borrower (positive rebate rate) or by the borrower to the lender (negative rebate rate) on the balance of the cash collateral pledged.<br>To be reported according to buckets to be determined. As a starting point, 0.5% increments could be considered (including negative values), with the final calibration of buckets according to the results of a pilot exercise. |
| 5.12. | Amount of securities lent or borrowed | Market value of the securities on loan or borrowed in millions of USD, on a gross basis (i.e. without considering netting agreements). |

**Table 6: Data elements related to *securities lending* and *borrowing* – collateral stock data**

| | Element | Definitions |
|---|---|---|
| 6.1. | Reference date | See "3.1 Reference date" in Table 3. |
| 6.2. | Position | See “5.2 Position” above in Table 5. |
| 6.3. | Sector of the reporting entity | See “3.3 Sector of the reporting entity” in Table 3. |
| 6.4. | Market segment – clearing | See “3.5 Market segment - clearing” in Table 3. |
| 6.5. | Collateral management | See “4.4 Collateral management” in Table 4. |
| 6.6. | Counterparty sector | See “3.6 Counterparty sector” in Table 3. |
| 6.7. | Counterparty jurisdiction | See “3.7 Counterparty jurisdiction” in Table 3. |
| 6.8. | Collateral type | See “4.8 Collateral type” in Table 4. |
| 6.9. | Collateral quality | See “4.9 Collateral quality” in Table 4. |
| 6.10. | Collateral currency | See “2.4 Currency” in Table 2. |
| 6.11. | Collateral residual maturity | See “4.11 Collateral residual maturity” in Table 4. |
| 6.12. | Jurisdiction of the issuer of the collateral | See “3.7 Counterparty jurisdiction” in Table 3. |
| 6.13. | Haircut | See “4.13 Haircut” in Table 4. |
| 6.14. | Re-use (*if collateral type is a non-cash*)<br>or reinvestment (*if collateral type is cash*) | Re-use: see “4.14 Re-use” in Table 4.<br>Reinvestment: total amount of cash collateral reinvested in:<br>• registered money market fund (MMF)<br>• any other commingled pool (COM)<br>• the repo market (REPO)<br>• a direct purchase of securities (DIR)<br>• other |
| 6.15. | Cash reinvestment rate | Provided only if collateral type is cash. Calculated as the average rate received on cash collateral reinvestment. |
| 6.16. | Collateral market value | See “4.15 Collateral market value” in Table 4. |

***Q2-7. Does the proposed definition of securities lending provide practical basis for the collection of comparable data across jurisdictions as well as the production of comprehensive and meaningful global aggregates?***

***Q2-8. In a later stage, a list of transactions that are economically equivalent to securities lending may be added to the reporting framework (see also Section 6 for details). Which economically equivalent transactions would you suggest for future inclusion? Please provide a definition of such transactions and explain the rationale for inclusion.***

***Q2-9. For securities lending, do you think that an additional table with flow data would add insights into the operations of securities financing markets and assist regulators in their financial stability monitoring?***

***Q2-10. Are the proposed definitions and level of granularity of data elements as described in Tables 5 to 6 appropriate for consistent collection of data on securities lending markets at the national/regional level and for aggregation at the global level? In particular, are the detailed breakdown of major currencies (in Table 2), sector of the reporting entity and counterparty as well as bucketing for securities lending fees or rebate rates (in Table 5), residual maturity (in Table 5), collateral residual maturity and collateral type (in Table 6) appropriate? If not, please specify which definitions or classifications of data element(s) require modification, why the modification is necessary, and the alternative definitions/classifications.***

***Q2-11. Do you foresee any practical difficulties in reporting the total market value of collateral that has been re-used or cash collateral reinvested? Do you have any suggestion for addressing such difficulties?***

***Q2-12. Do the classifications provided for "market segment – trading" (in Table 5) and "market segment – clearing" (in Table 5 and 6) appropriately reflect relevant structural features of the securities lending markets? Are there additional structural features of securities lending markets that should be considered?***

***Q2-13. Are there additional securities lending data elements that should be included in the FSB global securities financing data collection and aggregation for financial stability purposes? Please describe such additional data elements, providing definitions and the rationale for their inclusion.***

### *2.2.3 Margin lending*

Margin lending entails the provision of collateralised loans by a financial institution (usually a bank or a broker) to clients who are seeking leverage of their trading positions by borrowing money from their broker. The securities serving as collateral are held in margin accounts and are often re-hypothecated by brokers to fund the loans provided and eventually to reduce the cost of funding to the clients. In most jurisdictions, margin lending is included in the "prime brokerage" services provided to the client based on a margin agreement between the financial institution and the client.

For the purpose of the collection and aggregation of securities financing data at the global level, the FSB would only focus on margin lending provided to non-retail clients as these transactions may pose risks to financial stability similar to those of repos and securities lending. The relationship between broker and client typically includes various types of trading activities not limited to securities financing transactions but also including short sales of securities and trading of OTC and listed derivatives. The process for determining the collateral for each client will apply across the range of those transactions and will often include consideration of the credit risk of the client as well as the risk associated with the client's full portfolio of positions.

While margin lending is similar to repo and securities lending transactions, it also exhibits several important differences. The main similarities include:

- each type of transactions involves the temporary exchange of assets, namely the provision of cash secured against collateral;
- margin lending allows banks or brokers to create "collateralised" short-term liabilities;
- each type of transactions creates leverage and facilitate maturity and liquidity transformation.[21]

The major differences are:

- unlike most repo transactions, margin lending is conducted on a portfolio basis and subject to portfolio margining;
- most repo and securities lending activities are governed by industry-standard master agreements, while margin lending is governed by margin agreements that could differ across brokers and jurisdictions;
- repo and securities lending usually involve temporary transfer of title or all incidents of ownership of the collateral, while margin lending only provides the broker with the right to re-hypothecate the collateral, although the ability of the broker to re-hypothecate the collateral may be restricted by contract or regulation. However, once

[21] In some jurisdictions, the amount of transformation and leverage allowed for margin lending is limited by laws and regulations (e.g. in the US, the Federal Reserve Board Regulation T and FINRA's Portfolio Margin Rule).

the collateral has been re-hypothecated by the broker, then it has the same obligation as under a repo or securities lending transaction to return "equivalent securities" to the client.

The FSB believes that including margin lending transactions in the scope of the global data collection and aggregation is essential, since margin lending have economic similarities to repo and securities lending, and may pose similar risks to financial stability. Moreover, its inclusion in the data collection is consistent with the scope of the FSB framework on numerical haircut floors.[22]

The collection of data for margin lending requires the compilation of specific tables for this transaction type (see Table 7 – 9 below). Most proposed data elements for margin lending are similar to what required for repo and securities lending, in which case the definitions in previous Tables are referenced.

**Table 7: Data elements related to *margin lending* – loans stock data**

| | Element | Definitions |
|---|---|---|
| 7.1. | Reference date | See "3.1 Reference date" in Table 3. |
| 7.2. | Sector of the client | See "3.6 Counterparty sector" in Table 3. |
| 7.3. | Jurisdiction of the client | See "3.7 Counterparty jurisdiction" in Table 3. |
| 7.4. | Loan currency | See "2.4 Currency" in Table 2. |
| 7.5. | Residual maturity of the outstanding loans | See "2.3 Original maturity" in Table 2 for the maturity buckets proposed for reporting. |
| 7.6. | Loan rate | Sum of benchmark and spread, to be reported according to buckets to be decided. As a starting point, 1% increments could be considered, with the final calibration of buckets according to the results of a pilot exercise. |
| 7.7. | Amount of outstanding loans | Total amount of loans in millions of USD (excluding short sale proceeds). |
| 7.8. | Customers short positions | Market value of short position in millions of USD. |

[22] See http://www.financialstabilityboard.org/wp-content/uploads/r_141013a.pdf.

**Table 8: Data elements related to *margin lending* – collateral portfolios**

| | Element | Definitions |
|---|---|---|
| 8.1. | Reference date | See "3.1 Reference date" in Table 3. |
| 8.2. | Sector of the client | See “3.6 Counterparty sector” in Table 3. |
| 8.3. | Jurisdiction of the client | See “3.7 Counterparty jurisdiction” in Table 3. |
| 8.4. | Collateral type | See “4.7 Collateral type” in Table 4. |
| 8.5. | Collateral quality | See “4.8 Collateral quality” in Table 4. |
| 8.6. | Jurisdiction of the issuer of the collateral | See “3.7 Counterparty jurisdiction” in Table 3. |
| 8.7. | Currency of the collateral | See “2.4 Currency” in Table 2. |
| 8.8. | Collateral residual maturity | See “4.11 Collateral residual maturity ” in Table 4. |
| 8.9. | Margin requirement | Margin requirement across the entire portfolio (margin loans, shorts and any other cross-margined products), to be reported according to buckets to be decided. As a starting point, 5% increments could be considered, with the final calibration of buckets according to the results of a pilot exercise. |
| 8.10. | Re-use | Total long market value of collateral that have been reused. |
| 8.11. | Collateral market value | Total long market value of collateral. |
| 8.12. | Free credit balances | Total amount of net excess cash balances, excluding short sale proceeds. |

**Table 9: Data elements related to *margin lending* – funding sources**

| | Element | Definitions |
|---|---|---|
| 9.1. | Reference date | See "3.1 Reference date" in Table 3. |
| 9.2. | Funding sources | The following funding sources for financing client margin lending should be considered:<br>• Repo (including sell/buy back)<br>• Cash collateral from securities lending<br>• Free credits[23]<br>• Proceeds from customer short sales<br>• Proceeds from broker short sales<br>• Unsecured borrowing<br>• Other |
| 9.3. | Market value of funding sources | Market value of funding source balances in millions of USD.<br>If it is not possible to specifically assign funding sources to the subset of margin lending activity, a pro-rata amount of total funding activities could be an accepted estimate. |

***Q2-14. Does the proposed definition of margin lending provide practical basis for the collection of comparable data across jurisdictions as well as the production of comprehensive and meaningful global aggregates?***

***Q2-15. In a later stage, a list of transactions that are economically equivalent to margin lending may be added to the reporting framework (see also Section 6 for details). Which economically equivalent transactions would you suggest for future inclusion? Please provide a definition of such transactions and explain the rationale for inclusion.***

***Q2-16. Are the proposed definitions of data elements as described in Tables 7 to 9 appropriate for consistent collection of data on margin lending at the national/regional level and for aggregation at the global level? In particular, does the collection of the data elements in table 9, which represents a specific requirement for margin lending, provide relevant information for financial stability purposes? Do you foresee any particular difficulties to reporting the required data elements at the national/regional level?***

***Q2-17. Are the detailed breakdown of major currencies (in Table 2), sector of the client and bucketing for loan rates (in Table 7), collateral type and bucketing for margin requirements (in Table 8) and funding sources (in Table 9) appropriate? If not, please specify which definitions or classifications of data element(s) require modification, why the modification is necessary, and the alternative definitions/classifications.***

[23] Liabilities of a broker-dealer to customers subject to immediate cash payment on demand, i.e. the amount of cash that can be withdrawn from a margin account, calculated as the excess value of margin securities.

***Q2-18. Is the collection of the data on the customers' short position, in addition to the value of outstanding loans, a necessary metric for assessing the overall clients' exposures and for financial stability purposes? Do you foresee any practical difficulties to report this data element at the national/regional level?***

***Q2-19. Are there additional data elements in relation to margin lending that should be included in the FSB global securities financing data collection and aggregation for financial stability purposes? Please describe such additional data elements, providing definitions and the rationale for their inclusion.***

## 3. Data architecture

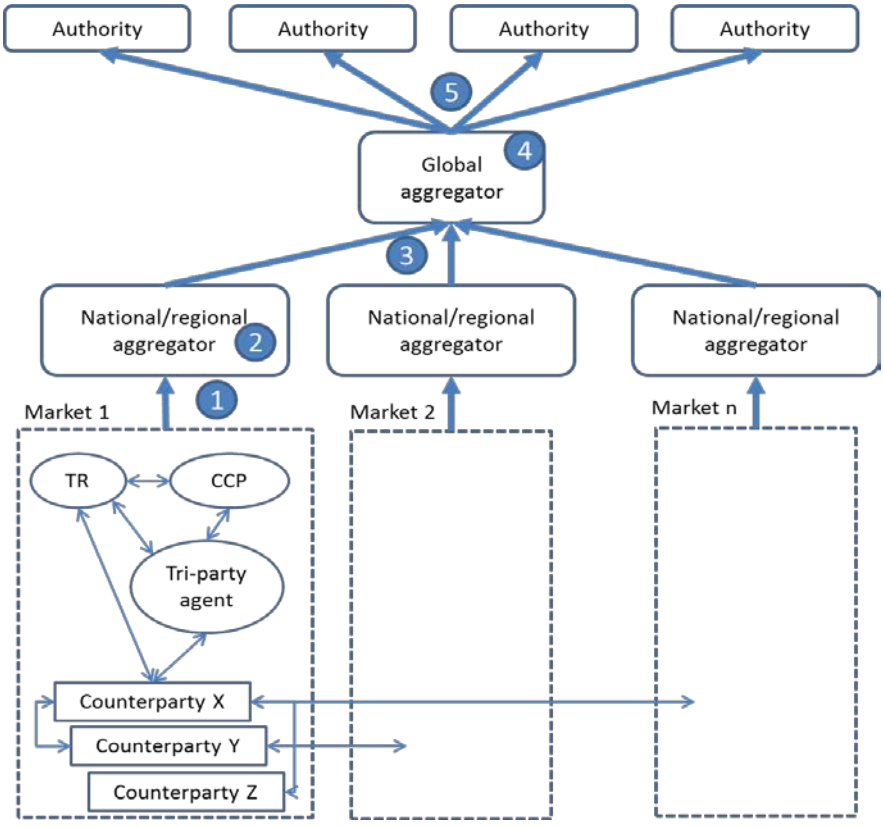
This section describes the recommended standards and processes to ensure: (i) the maximum consistency in the data collection by national/regional authorities; (ii) minimisation of double-counting at the national/regional and global level; (iii) the adequate distribution of the information collected; and (iv) proper confidentiality throughout the process.

Recommendations 2 and 3 of the August 2013 Report describe the global data collection and aggregation as a two-tiered process:

- First, national/regional authorities would collect data frequently and with a high level of detail. This recommendation also highlights that authorities should decide the most appropriate way to collect such data, depending on their market structure and building on existing data collection processes and market infrastructure where appropriate.
- Then, national/regional authorities would provide aggregated data (excluding individual counterparty positions) to the FSB, which would play the role of a global aggregator.

These two tiers can further be divided into five phases, as illustrated in Exhibit 1.

**Exhibit 1 - Reporting and compilation of global aggregates**



The first tier will take place in each jurisdiction and would encompass:

(1) the flow of data from reporting entities to national/regional authorities; and

(2) the processing of data at the national/regional level, which includes the removal of double-counting and compilation of aggregates that meet the recommendations described in Section 2.2 of this document.

The second tier refers to the global data aggregation process, and encompasses:

(3) the transmission of aggregated data from national/regional authorities to the FSB as global aggregator;

(4) the processing of data at the global level, which includes the removal of remaining (cross-border) double-counting and the production of meaningful global aggregates; and

(5) the distribution of information from the FSB to the relevant authorities and, potentially, to the general public.

Recommendation 2 of the August 2013 Report allows national/regional authorities to determine the most appropriate way to organise the data collection in the first tier. However, it also recommends that the national/regional authorities design their data collection in such a way as to facilitate aggregation at the global level.[24] The second tier should follow a single harmonised approach to limit issues in the compilation of global aggregates and enhance the comparability between national/regional aggregates.

This section on data architecture is divided in two parts. The first part contains a discussion of a number of issues related to the first tier of the data collection and aggregation process that could compromise the quality of the information collected or its comparability across jurisdictions (Section 3.1). Issues that could prevent the elimination of double-counting are also described. National/regional authorities are expected to consider these issues as appropriate when developing the data collection process at the national/regional level.

The second subsection contains a discussion of legal and operational issues related to the global data collection and aggregation process (Section 3.2). The primary concern relates to data confidentiality, and the rules by which various authorities and institutions will have access to all or part of the data according to their mandate. The potential rules by which non-confidential aggregates could be distributed to the general public are also considered.

Finally, issues related to double-counting, with possible solution and an evaluation of the possibility of over-netting, are described in Section 3.3.

[24] In addition, the harmonisation of national/regional approaches is desirable to reduce the reporting burden for reporting institutions active in multiple jurisdictions.

## 3.1. First tier: Data collection at the national/regional level

Recommendation 2 of the August 2013 Report states that the data collection processes at the national/regional level could be organised in different ways. This would allow the data collection process to reflect the diversity of national/regional markets in practices, procedures and systems for clearing and settling securities financing transactions. However, a wide divergence in the national/regional data collection processes may pose practical challenges in the aggregation of data at the global level and compromise the quality of the global aggregates. To overcome such problems, there should be consistent data elements definitions as well as minimum granularity and collection frequency, in order to produce meaningful global aggregates. In addition, the data collection and aggregation procedures should address the double-counting issues that appear whenever two sides of the same transaction are reported.

The following sections discuss alternative approaches that national/regional authorities might choose while retaining the ability to provide data to the FSB which will be combined into global aggregates, focusing on the following issues:

(i) the sources of data;

(ii) the reporting population and the identification of trades with non-reporting entities;

(iii) the level of granularity of the information collected; and

(iv) the aggregation and classification of information at the national/regional level.

### *3.1.1 Sources of data*

National/regional authorities may have access to at least three main sources for the data elements described in Section 2:

(i) Bilateral counterparties in a trade (reporting entity, as defined in "3.3 Sector of the reporting entity" in Table 3);

(ii) Trading venues, securities settlement systems, CCPs and tri-party agents; and

(iii) Trade repositories (TRs), which would provide the authorities with access to transaction level data provided by counterparties.[25]

The three approaches are not mutually exclusive and which source or sources are preferred may depend on the market structure and the contract type.

The first approach that a national/regional authority may adopt would be to collect data directly from the counterparties to a trade. This may be the only source available if there are no financial market infrastructures offering services to the trading and post-trading of securities financing transactions (e.g. trading venues, CCPs). If the counterparties often use agents to conduct the transactions (e.g. agent lenders in securities lending transactions), the

[25] This solution is envisaged in the EU (see Annex 2).

national/regional authorities may decide that the information should be collected directly from such agents rather than from the counterparties.

When the counterparties are the preferred source of data, authorities may wish to verify that they have all the data requested for the national/regional data collection and for the calculation of global aggregates. For example, for transactions secured by baskets of collateral, timely and detailed information on the composition of those baskets can only be provided by tri-party systems or electronic trading platforms, unless such information are disclosed by those service providers to counterparties with a proper lag and granularity.

The second approach would be for the national/regional authority to collect the data from third-parties such as CCPs and tri-party agents, which would send information directly on behalf of the counterparties for centrally-cleared transactions or transactions managed by tri-party agents. This would reduce the number of sources from which national/regional authorities would need to collect data.[26] However, this approach would not cover a potentially significant part of the market such as non-centrally cleared bilateral transactions. Moreover, care should be taken to prevent duplicate reporting of trades from multiple intermediaries, for example by both a CCP and a tri-party agent.

In principle, the first two approaches could be combined, with the resulting dataset providing full market coverage. However, a mixed approach would require the ability to clearly identify every transaction to avoid the possibility of double counting (the possibility that a single transaction is counted more than twice is possible in a mixed reporting population where both counterparties and CCPs provide the data).

The third approach would be to require counterparties to report transaction level data to one or several TRs (as envisaged in the EU[27]) and then the responsible authorities could access the data stored in TRs. If several TRs exist in the same jurisdiction or region, an appropriate process to remove duplicate transactions before creating the national/regional aggregates would be necessary. If counterparties are allowed to report to several TRs in different jurisdictions, it also needs to be ensured that adequate mechanisms exist to create national/regional aggregates, i.e. that transactions can be regionally assigned.

Any of these approaches discussed above are capable of providing the necessary data for creating global aggregates. The aggregation process and the management of double-counting issues arising in the national/regional market among resident market participants will be addressed by the national/regional authorities responsible for compiling the data (see Section 3.3). For cross-border transactions, it is essential that the national/regional authorities identify whether the foreign counterparty is included in the global reporting population and hence is reporting the same trades/positions that may also be reported by another jurisdiction (see also Section 3.1.2).

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[26] Potential sources for detailed data could also be other market infrastructures like trading platforms and settlement systems.

[27] See Annex 2 for details.

### *3.1.2 Reporting population and non-reporting entities*

Depending on the reporting framework adopted by national/regional authorities, data collected could cover either the activities of all counterparties (whole population) or a subset of counterparties that is broadly representative of the market. The latter will divide market participants into those providing data (reporting entities) and those not providing data (non-reporting entities). The two possible approaches for reporting are:

- *Full population* – All counterparties and all securities financing transactions covered by the definitions (independently of their size) will be reported. All local market participants are considered reporting entities and non-resident market participants are classified as non-reporting entities;

- *Market-representative subset* – The national/regional authorities could collect and/or report at the global level only transactions above a certain amount (threshold on transactions size) or omit transactions conducted by insignificant counterparties (i.e. entities with annual activity or size of total assets smaller than a certain amount), or both. To ensure international comparability and consistent aggregation at the global level, national/regional authorities will need to confirm that the reporting population is comprehensive and highly representative of the respective securities financing markets. Market participants resident in other countries will still be classified as non-reporting entities.

If a national/regional authority chooses to use a threshold on transactions size or to exclude non-relevant transactions, the methodology for choosing which transaction to include should be transparent and communicated to the FSB and all other jurisdictions. If a threshold is applied to exclude insignificant counterparties (or in a mixed approach combining individual transaction and overall activity size), market participants should be separated into reporting and non-reporting entities (see "3.3 Sector of the reporting entity" in Table 3), based on a list of reporting entities maintained by the competent national/regional authority.[28]

When determining the reporting population, it is important for national/regional authorities to ensure all transactions of reporting entities operating in the jurisdiction are covered so as to derive meaningful global aggregates.[29] If national/regional authorities adopt a broader reporting scope (e.g. world-wide consolidation of groups with head offices located in the jurisdiction), transactions reported by foreign subsidiaries or foreign branches of national/regional reporting entities should be excluded before sending the data to the FSB.

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[28] National/regional authorities should work in close cooperation with the FSB to develop reference lists of reporting institutions based on global codes (e.g. LEI) and avoid inconsistencies.

[29] Such reporting institutions should include both branches of foreign institutions registered in the jurisdiction and subsidiaries of foreign institution established in the jurisdiction.

### *3.1.3 Granularity of the data*

National/regional authorities may collect data with various degrees of granularity. Granular reporting refers to counterparty-by-counterparty and security-by-security reporting, while aggregate reporting refers to any other reporting which groups more than a single counterparty or a single security in some an aggregate (i.e. position level data or portfolio level data). In both cases, a consistent classification of market participants and collateral will be needed to support the compilation of national/regional and global aggregates, as well as to remove double-counting.

### *3.1.4 Aggregation and classification of the data*

According to the two-tiered global data collection and aggregation process, national/regional authorities will be asked to aggregate and classify data based on the taxonomies and definitions described in Section 2 of this document, and then send the aggregates to the FSB. This classification of the data requires the extraction of certain unique identifiers such as LEI or ISIN and characteristics [30] that could be performed centrally by the national/regional authority collecting the data (centralised approach), or distributed across reporting entities which would classify their own transactions (distributed approach).

In the case of the centralised approach, national/regional authorities will have to create reference databases to be able to associate the codes reported by market participants[31] with the required classifications (e.g. sector and jurisdiction of the counterparty, or asset type and quality of the collateral).

The primary drawback of the centralised approach is the cost of establishing and maintaining the reference databases that will have to be in place to support the production of aggregate statistics. National/regional authorities could rely on information already available from data providers or collected in cooperation with market participants.

In the case of the distributed approach, each reporting entity will assign the classifications before sending the data to the national/regional authorities. Reporting entities may also be required to aggregate the transactions by their characteristics, according to the categories requested by the FSB, and report those aggregated data to the national/regional authorities.

The primary drawback of this approach is not only the burden it creates for reporting entities, but also the additional burden for national/regional authorities, who might need to verify that the same classification scheme is applied consistently by all reporting entities.

Regardless of the approach adopted, national/regional authorities will need to work in close cooperation with the FSB to develop reference databases and avoid inconsistencies.

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[30] For example, residence of LEI and its business sector, or issue date and rating of a security.

[31] For example, LEI for the identification of market participants or ISIN for the securities and collateral.

## 3.2. Second tier: data aggregation at the global level

Recommendation 3 of the August 2013 Report specifies that the aggregates calculated at the national/regional level should be transmitted to the FSB, which will play the role of global aggregator.

The most sensitive data would be collected and processed in the first tier of the collection process where granular data are transmitted from reporting institutions to the national/regional authorities. Once processed by the national/regional authorities, the data transmitted to the FSB will be limited to aggregates without individual counterparty information. Data confidentiality in the first tier of the process is not covered by this document, as it will be addressed by national/regional authorities according to local rules and procedures.

Details on the aggregated data to be provided to the FSB by national/regional authorities are discussed in Section 2. This section considers some of the practical issues that should be addressed in relation to global data aggregation such as the interaction between the national/regional authorities and the FSB and the appropriate level of access for a wide range of authorities to the data stored by the FSB in its role as the global aggregator.

### *3.2.1 Legal and operational issues*

The national/regional authorities must have the legal mandate to obtain the relevant data with an adequate level of granularity. Even with such mandate, the national/regional authorities may face legal obstacles in sharing the information obtained in a particular capacity (for example, due to the supervisory capacity of the relevant authority) with the FSB and/or in allowing the FSB to share that information with other interested parties. Since data transmitted by national/regional authorities to the FSB will be aggregated and with no identification of individual counterparties or positions, some potential legal constraints may be minimised. However, there may remain some legal obstacles. Given that some authorities are currently in the process of defining their national/regional reporting framework, these authorities may wish to identify at the earliest stage any potential legal barrier to sharing aggregated data with the FSB in order to begin the process of adapting the legal framework if necessary.

The national/regional authority collecting the data may be subject to laws and regulations that prohibit or limit the data collected in fulfilling a specific mandate (e.g. banking supervision) from being used for other purposes or shared with other authorities. In addition, the legal framework may specify a confidentiality regime even for the aggregated data shared with the FSB or other interested institutions. This requirement may expose the national/regional authority to legal liability in case of breach of these confidentiality rules (see Section 3.2.2 on confidentiality issues).

Should legal obstacles exist and changes in the legal framework are unfeasible, national/regional authorities may wish to explore other alternatives. For example, they may be able to implement a voluntary framework through a multilateral memorandum of understanding (MMoU) between the authority and the reporting firms, to obtain the necessary approval to share the aggregates with the FSB and potentially with other interested authorities.

From an operational perspective, it would be necessary to: address the technical requirements for the transmission of data from the national/regional authorities to the FSB; develop technical solutions for storing and treating the data by the global aggregator; and define a framework for distributing the relevant information to interested authorities and, potentially, to the public.

### *3.2.2 Data confidentiality*

In order to safeguard the confidentiality of data at each of the two tiers, clear procedural rules on the treatment of confidential data should be defined. The FSB believes that national/regional authorities should assess the degree of confidentiality for each aggregated data point sent to the global aggregator. In the treatment of data and the sharing of aggregates with other reporting authorities and, potentially, the general public, the FSB would handle the reported and derived aggregates according to the following three levels of confidentiality, as specified by national/regional authorities:

(i) *Public* data could be freely shared with other reporting authorities and with the general public;

(ii) *Restricted* data could be shared with other relevant parties with legitimate policy needs, according to their mandate, but not disclosed to the general public;

(iii) *Confidential* data, where counterparties could be potentially identified (e.g. when one major market participant is operating in a jurisdiction) should not be shared at all.

Governance agreements will specify the process by which data are classified as restricted versus confidential (see Section 3.2.4). These agreements will also define the rules by which outside parties will have access to the data and the level of aggregation to which each will have access.

The FSB will adhere to these rules when compiling aggregates so that the derived aggregates preserve the desired confidentiality of input data and at the same time provide a useful global overview that is accessible to national/regional reporting authorities, relevant parties with legitimate policy needs (including international organisations) and the general public as appropriate. Assigned confidentiality flags (public, restricted and confidential) will have the same treatment as reported data and will prevent any disclosure of the data not intended to be disseminated. The FSB will also define rules to manage potential changes in the confidentiality of input data during the periods covered by certain time series.

### *3.2.3 Access to data on securities financing transactions*

The August 2013 Report specifies that the appropriate regulator access to data should be ensured in light of the chosen operational model and data architecture.

The FSB and other standard setting bodies have previously analysed the issue of access to data in relation to OTC derivatives transactions. The CPSS-IOSCO report on *Authorities'*

*access to trade repository data* (hereafter the "CPSS-IOSCO Report")[32] provides a model for appropriate regulator access to data, although there are some important differences in terms of data architecture and type of data to be collected. In the case of OTC derivatives, there is an obligation for market participants to report to TRs, which will store trade-level information. The information stored in the different TRs will be of interest for a number of authorities with diverse mandates. On the other hand, in the case of securities financing transactions, there is not a similar reporting obligation in all jurisdictions. The securities financing data will not be available at a similar level of granularity and will not necessarily be centrally stored in a single location.

Notwithstanding these differences, the classification of authorities' needs in the CPSS-IOSCO Report could help inform the discussion in the case of the securities financing data collection. One area of the CPSS-IOSCO Report which could be relevant is the discussion on the information stored in the central hub.[33] The CPSS-IOSCO Report identifies three different levels of information detail (*depth* of the information):

(i) *transaction-level data* - the level of detail at which an authority may view data that is specific to uniquely identifiable participants and transactions;

(ii) *position-level data* - the level of detail in which data reflect both the gross and netted open positions of a particular participant or a specific product or asset class; or

(iii) *aggregate-level data* - data that covers all participants, which can be classified and summed in different ways but is not specific to any uniquely identifiable participant or transaction.

According to these definitions, the data on securities financing transactions described in this document would be considered aggregate-level data.

The FSB will set up a governance group which will assess and define access rights in detail at a later stage, taking into account the mandate of the authority requesting access to the data and its need-to-know (e.g. in some jurisdictions reporting authorities could not have a supervisory mandate but a certain level of access could be granted in any case). As indicated in the CPSS-IOSCO Report, the level of detail needed by different authorities may vary depending on each authority's mandate.

The FSB, in coordination with the reporting authorities, could also develop summary tables to facilitate periodic reporting of the information (public or restricted) to all authorised parties. The FSB will also develop rules for responding to ad-hoc requests for information. Some aggregate-level data could be regularly made public by the FSB.

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[32] http://www.bis.org/publ/cpss110.pdf.

[33] Other area that could be of relevance to securities financing transactions is on the access to data maintained by national/regional authorities.

### *3.2.4 Governance*

In order to ensure a robust data aggregation process at the global level (or the second tier of global data collection and aggregation), defining robust internal rules and procedures for collecting, aggregating and disseminating the data is needed. The FSB will set up a governance group with representatives from all interested participating authorities. This governance group, according to the institutional framework chosen, would address the issues identified in the previous sections by:

- Defining the framework under which the data would be shared and transmitted to the global aggregator, and from the global aggregator to other parties (e.g. via bilateral contracts, multilateral contracts or multilateral memorandum of understanding - MMoUs);
- Discussing and coordinating solutions to the different legal or operational issues affecting the global data aggregation process;
- Promoting adequate coordination for the classification of restricted or confidential data to ensure that meaningful aggregates could be produced for interested authorities, and to ensure an adequate level of information is shared with the public;
- Defining the internal rules of access to the aggregate-level data (e.g. access to data with different levels of aggregation by the relevant parties, according to their mandate); and
- Determine if and to what extent there are any issues in the local data collections that create obstacles for the aggregation at the global level.

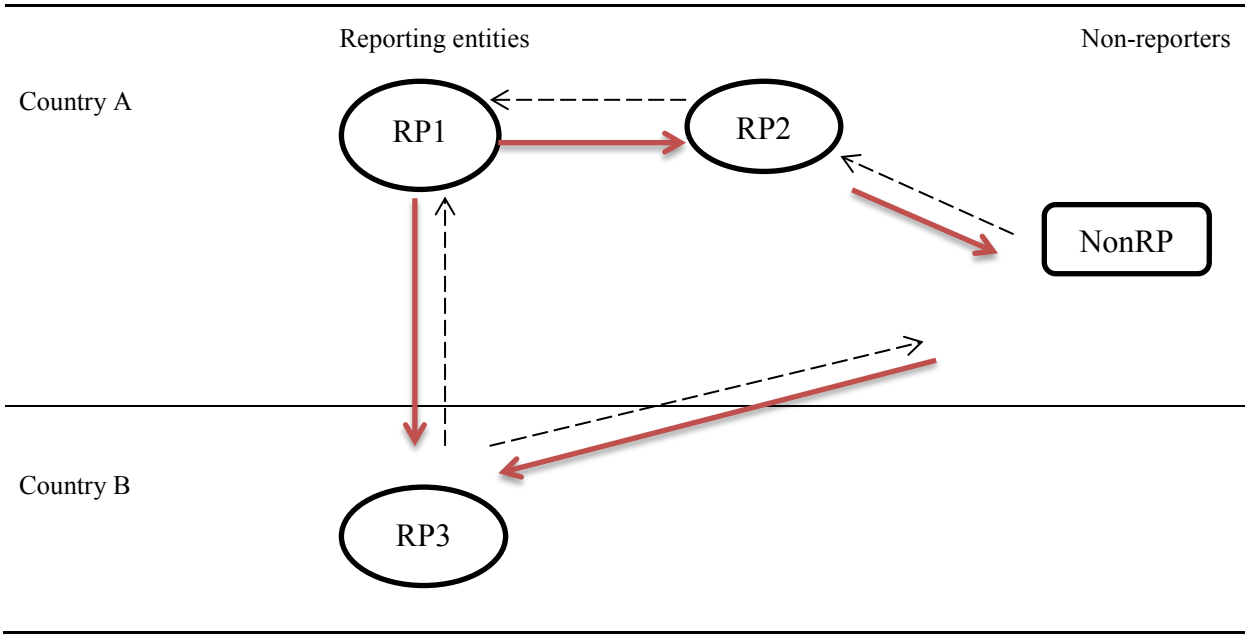
## 3.3. Double-counting

As highlighted above, national/regional authorities will need to address potential double-counting at the level of national/regional data collection to derive global aggregates regardless of the models those authorities adopt in relation to the four areas referred to in Section 3.1.

Double-counting occurs when both parties involved in a transaction provide the data. In the case of securities financing transactions, the same transaction may be reported twice, by both the lender and the borrower (if both are reporting entities), leading to an overestimation of the size of the overall securities financing market. Therefore it is necessary to make adjustments for double-counting, in order to derive meaningful aggregate measures.

The following example illustrates the double-counting in case of a jurisdiction where market participants will be required to report (Exhibit 2). The problems as well as the possible solutions would generally also apply to a TR reporting regime.

**Exhibit 2 – Illustration of double-counting**




In the example, there are three reporting and one non-reporting entities. Transactions between reporting entities will be double counted, while transactions between a reporting and non-reporting entity will not contribute to double-counting.

The reporting entities RP1 and RP2 as well as the non-reporting participant NonRP are all residents of the same jurisdiction A, while reporting entity RP3 resides in jurisdiction B. Solid arrows are cash legs of individual repo contracts whose security legs are shown as dotted arrows. The baseline scenario is for all reporting entities to report all transactions whether or not the reporting entity is the cash provider or the cash taker and without regard to issues arising from double-counting.

Under the baseline scenario, jurisdiction A report will include:

(i) RP1 report of RP1 to RP2 transaction

(ii) RP2 report of RP1 to RP2 transaction

(iii) RP2 report of RP2 to NonRP transaction

(iv) RP1 report of RP1 to RP3 transaction

Jurisdiction A report will thus turn out to include double-counting of the transaction between RP1 and RP2.

Jurisdiction B report will meanwhile include:

(i) RP3 report of RP1 to RP3

(ii) RP3 report of NonRP to RP3

Based on the reports from jurisdictions A and B, the global aggregate will count twice not only the RP1 to RP2 transaction reported by jurisdiction A but also the RP1 to RP3

transaction reported by jurisdictions A and B. In addition, the jurisdiction A report will not include the NonRP to RP3 transaction.

To address double-counting, the following two approaches may be considered:

- *The aggregate approach* - Reporting entities are required to classify or aggregate transactions based on the characteristics of the counterparty to the transaction. Aggregates could, for example, separate (i) transactions vs. other reporting entities in the same jurisdiction, (ii) transactions vs. entities in other jurisdictions, and (iii) transaction vs. non-reporting entities. This breakdown enables the identification of transactions reported by both counterparties from cases when only one side provided the data (i.e. transactions between reporting entity and non-reporting such as non-financial corporations, non-reporting financial corporations, or governments). This practice is currently used in the BIS Triennial Central Bank Survey of foreign exchange and derivative market activity[34] and the BIS semi-annual OTC derivatives statistics[35].
- *The granular approach* - Reporting entities are required to report data by individual transactions that include the counterparty identifiers to the national/regional aggregator. The national/regional aggregator identifies counterparties that are reporting entities and corrects double-counting. To ensure consistency, counterparties should be identified by their global LEI. Double-counting could then be removed looking at the individual security and counterparty pairs.

While the granular approach refers to counterparty-by-counterparty and security-by-security reporting, the aggregate approach refers to any other reporting which groups more than a single counterparty and single security in some sort of aggregate. If the aggregate approach is adopted, the responsibility of identifying transaction with other reporting entities will belong to each reporting entity. If the granular approach is adopted, the national/regional aggregator will be in charge of the identification of the counterparties reporting status.

Considering the reporting entities RP1 to RP3 as described in Exhibit 2, the table below provides a detailed illustration of how the two approaches could be applied.

[34] http://www.bis.org/publ/rpfx13.htm.

[35] http://www.bis.org/statistics/derstats.htm.

**Table 10 – Solutions to double-counting**

| Counterparties | Jurisdictions | Double-counting? | Solution | Comment |
|---|---|---|---|---|
| **1. RP1 and RP2 (both reporting entities)** | A | Yes | Cash legs: ($RP1$ + $RP2$)/2 | Double-counting in A's report. National authority corrects for intra-jurisdiction double-counting. |
| **2. RP2 and NonRP (reporting vs non-reporting entity)** | A | No | - | No double-counting in national/regional report. |
| **3. RP1 and RP3 (cross-border transaction between reporting entities)** | A or B | No | - | No double-counting in individual national/regional reports. |
| | A and B | Yes | Cash legs: ($RP1$ + $RP3$)/2 | Double-counting in aggregate (global) A and B report. Global aggregator corrects for cross-border double-counting. |
| **4. RP3 and NonRP (cross-border transaction between a reporting vs non- reporting entity)** | B | No | - | No double-counting in national/regional or global report. |

### *3.3.1 Over-netting*

Assuming that each transaction (between reporting entities) is reported twice can introduce a bias if reports from some reporting entities do not provide data for each trade or classify transactions in a slightly different way, for example:

- Reporting entities does not provide the full amount of the cross-border transactions between reporting entities due to a national/regional reporting threshold, while other counterparty does not apply the same reporting threshold;
- Reporting entities tends to use 'other, unallocated' element when classifying transaction into aggregates, while other reporter classifies the same transaction in any other bucket;

The resulting effect is referred to as over-netting, and to overcome it the correction for double-counting should be adjusted to include maximum of the national/regional aggregate and derived global aggregate.

***Q3-1. Is the data architecture described in Section 3 adequate to support the global securities financing data collection and aggregation? Are there other relevant issues to be considered?***

***Q3-2. Do you have any other practical suggestions to reduce any additional reporting burden and improve the consistency of the global data collection?***

***Q3-3. Do the proposed measures for minimising double-counting at the global level constitute a practical solution to the problem?***

***Q3-4. Are there any confidentiality issues that you consider relevant for the global securities financing data collection other than those explained above? If so, please provide any practical suggestions to overcome such issues?***

# 4. Recommendations for national/regional data collections

National/regional authorities should consider the standards and processes outlined in this document to be a recommended minimum set of requirements when designing their procedures for local data reporting and global data aggregation purposes. While they may extend the scope and granularity of the data collection, national/regional authorities should consider the following six recommendations to derive meaningful global aggregates for authorities' financial stability monitoring and policy responses:

(i) **National/regional data standards**, while reflecting the specific features of the local markets, **should be consistent with the data elements, granularity level and definitions as defined in this document**. High quality and complete information should be collected by national/regional authorities and aggregated for the FSB.

(ii) In order for the FSB to be able to perform global aggregation on a monthly basis, all jurisdictions should **design their local requirements with a minimum monthly reporting period and frequency**. The timeliness for the submission to the FSB should allow the FSB itself to produce global aggregates and trends no later than a month after the reference date.[36] This period includes all the operations needed for national/regional authorities to collect data from market participants, to check the quality and remove double-counting at the national/regional level and to produce the aggregates for the FSB.

(iii) In order to allow for international comparability and consistent aggregation at the global level, **the reporting population at the national/regional level should be comprehensive or at least highly representative of the respective securities financing markets**. There may be circumstances in which national/regional authorities choose to exclude certain entities or portfolios from national/regional reporting if they are insignificant in number or size while still ensuring international comparability and consistent aggregation at the global level. National/regional authorities should inform the FSB about thresholds and criteria for such exclusion of insignificant entities or portfolios.

(iv) **National/regional authorities should define an appropriate consolidation scope that would not hamper the global comparability and aggregation of data.** If the scope of the reporting is on a world-wide consolidated basis (as typical in many regulatory statistics), a specific flag should be included to allow extracting the local operations to report to the FSB without duplications with transactions reported by other jurisdictions.

[36] A reporting lag of three weeks could be considered as an initial target. The FSB could consider in the future if a shorter lag is feasible, with the implementation of automated procedures in reporting jurisdictions.

(v) Before reporting to the FSB, authorities are asked to **correct national/regional aggregated data for double-counting**, taking into account the characteristics of their data sources.

(vi) **The use of internationally agreed standard identifiers at the national/regional level reduces the reporting burden and improves the consistency of aggregates at the global level**. In particular, the use of Legal Entity Indicators (LEI) to identify counterparty type at the national/regional level is recommended to produce comparable sector and jurisdiction aggregations.

***Q4-1. Do the proposed recommendations as set out above adequately support the authorities in deriving meaningful global aggregate data? Are there any other important considerations that should be included?***

# 5. Use of data

The data elements described in Section 2 represent a minimum set necessary to derive meaningful global aggregates that will help inform authorities in their financial stability monitoring and policy responses. In order to derive them based on consistent and sufficiently granular data with minimal double-counting, the FSB expanded the original list of data elements set out in the August 2013 Report to include additional information to assess spill-overs and other vulnerabilities in the financial system. The proposed additional data elements would allow a better assessment of the interconnectedness across sectors and jurisdictions, of risk concentrations to market segments or group of counterparties and of the dependence on specific collateral asset classes. The monthly data collection would provide for a better comparison of trends across products, counterparty sectors or jurisdictions to identify potential imbalances.

The following sections highlight the main uses of the additional data elements in identifying relevant trends and risks in the global securities financing markets. An overview of how each data element detailed in Section 2 helps inform authorities in their financial stability monitoring and policy responses is summarised in Annexes 3, 4 and 5.

The data aggregated at the global level could suggest potential financial stability issues even if their granularity could not be always sufficient for drawing unambiguous conclusions. In those cases, in-depth investigation would be needed at the national/regional level, where more detailed data should be available, or at the global-level.[37]

In addition to financial stability purposes, data on securities financing markets might also be useful for prudential supervisors to compare worldwide consolidated data reported by their G-SIBs with global aggregates and trends. Furthermore, the proposed data collection could add to the information available with the implementation of the CPSS-IOSCO *Principles for FMIs,*[38] to monitor systemic risks originating from financial market infrastructures (FMIs) such as payment and settlement systems, CCPs and TRs,[39] that are involved in repos or related collateral activities.

## 5.1. Flow data

Flow data on reverse repo are needed to assess the changes in the evolution of new contracts. Flow data on reverse repo transactions (Table 2) are classified by a limited set of variables (currency and maturity of the loan and number of transactions).

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[37] For example, large long-term reverse repo positions coupled with an increasing re-use of the received collateral to raise additional funds (e.g. in the short-term market) could be an indicator of growing leverage on the side of liquidity providers. However, the simplified structure of Tables 3 and 4 does not allow the full linking of loans and collateral data that may be available to national/regional authorities.

[38] http://www.bis.org/cpmi/publ/d101a.pdf.

[39] See the CPSS-IOSCO Report on Authorities' access to trade repository data (http://www.bis.org/cpmi/publ/d110.pdf).

Such information would help monitor the turnover in the repo market and assess market shifts. It would also allow assessment of whether differences in the market activity in several jurisdictions (of the reporting entity) are linked to market structural factors, and detection of market freezes/pullbacks in case of financial stress.

## 5.2. Loan data

The aggregate information on the sector and jurisdiction of the reporting entities (data elements 3.3 and 5.3[40]) would support the analysis of risk concentrations, the evolution of market structure across sectors and jurisdictions, as well as their resulting implication for financial stability. This information, linked with the sector (3.6, 5.6 and 7.2) and jurisdiction (3.7, 5.7 and 7.3) of the counterparty, could be used to evaluate the degree of interconnectedness among market participants as well as with the CCPs, and to assess the size of exposures among non-bank entities (including those involved in shadow banking activities). In case of market stress affecting a specific sector or jurisdiction, an overview of the interconnections in the global market would be helpful to anticipate potential contagions.

The information on market segments (trading – 3.4 and 5.4 - and clearing mechanisms - 3.5 and 5.5) would help authorities to monitor shifts toward or away from trading practices (principal to principal, via an agent) and from clearing/netting agreements. Authorities could also use the segment data to gain insights on (i) the evolution in the market's degree of intermediation; (ii) trends in reporting entities' counterparty risk protection and concentration of risks in different sectors (e.g. CCPs); (iii) the concentration of specific collateral types, potentially due to market practices (e.g. intermediation via agents), structural factors (e.g. regulations) and technical aspects (e.g.to the impact that netting arrangements within clearing mechanisms have on the usage of particular types of collateral or of cash consumption).

The residual maturity of loans (3.8, 5.9) is important for monitoring the trend towards longer or shorter-term funding. Expanding short-term repo positions would increase the overall roll-over risk since, in the case of a run, borrowers would need alternative funding sources or sell their assets to replace the funds from the expiring repo positions.

The currency of loans (3.10, 5.10 and 7.4) associated with the sector (3.6, 5.6 and 7.2), jurisdiction of the counterparty (3.7, 5.7 and 7.3) as well as the sector of the reporting entity (3.3 and 5.3) would provide an assessment of the potential build-up of aggregated liquidity risk in certain currencies by market participants without access to central bank liquidity. In times of stress, positions with CCPs may be adversely affected by additional margin calls to cover currency risks (e.g. variation margins, including intraday margins required by CCPs).

Information on repo rate (3.9) and securities lending fee and rebate rate (5.11) would help monitor the funding conditions for specific asset types of the securities lent, since they are related to the market supply and demand of a security.

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[40] Since the data would be collected with a locational approach, the jurisdiction of the reporting entity is not needed in the tables and it could be derived by the jurisdiction of the national/regional authority reporting to the global aggregator.

## 5.3. Collateral data

The information on collateral type (4.8, 6.8 and 8.4) and quality (4.9, 6.9 and 8.5) would help identify large exposures backed by a specific asset class and of related systemic vulnerabilities due to potential shocks in the underlying assets market. An indicator of concentration in specific collateral types could be provided by the size of debtor positions collateralised by a specific asset class (potentially exposed to higher risk as in the case of ABS, less liquid equity or non-investment grade debt securities). The reliance of large debtor positions on a specific asset class could increase the risk of a fire sale of collateral securities following a counterparty default. At the same time, the increased volatility of asset prices in a specific market following a shock affecting that market could increase the risk of default of those counterparties and sectors which heavily use those specific assets as collateral for funding purposes.

The currency of collateral (4.10, 6.10 and 8.7) paired with the currency of the related loans would allow the identification of mismatches at the aggregate level, across asset classes and counterparty types. Financial stability risks may stem from an increase in the volatility of exchange rate between the currency of collateral and the currency of loans, as sudden variation in the exchange rate could translate into insufficient collateral or in additional margin calls. At the same time, the maturity of the collateral (4.11, 6.11 and 8.8), compared with the maturity of the loans, could provide an indicator of maturity mismatches at the aggregate level, by counterparty sector and jurisdiction. If the maturity of collateral is shorter than the maturity of loans, then collateral substitution necessarily occurs during the lifetime of the loan, thus increasing the risk of the cash borrowers of not being able to provide new collateral and the risk of the lenders of not having a properly collateralised exposure.

The collection of the jurisdiction of the issuer of the collateral (4.12, 6.12 and 8.6; to be reported only for securities) would be helpful to assess cross-border interconnections and the associated risks. It would be also possible to identify large exposures backed by collateral subjected to a specific country risk, in case of a crisis impacting an individual jurisdiction.

The classification of the haircuts by buckets (4.13 and 6.13) would help in assessing the evolution of the potential build-up of leverage in the financial system through securities financing.[41] It will also help in monitoring the implementation of the new FSB regulatory framework for haircuts on non-centrally cleared securities financing transaction, including the numerical haircut floors. A general decline in haircuts may be fuelling the build-up of leverage in the financial system. On the other hand, an increase might imply a pullback by cash lenders from the repo market, reducing credit provision and/or increasing collateral needs for borrowers and thereby potentially worsening financial stress.[42]

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41 http://www.financialstabilityboard.org/wp-content/uploads/r_141013a.pdf.

42 The FSB is aware that (i) aggregated haircuts might provide partial information on credit risk protection in repo positions (at the individual transaction level additional information could be available, e.g. on bilateral credit lines), and (ii) changes in haircuts might lag behind changes in credit risk perception. Nevertheless, collecting and aggregating haircuts remains relevant for financial stability purposes, since changes in the haircuts level could facilitate or tighten the credit growth.

Crossing the haircuts with breakdowns by "collateral type", "collateral quality", "jurisdiction of collateral issuer", "sector of the reporting entity" and "sector of the counterparty" would allow the assessment of whether changes in the haircut level are driven by concerns about the liquidity of specific asset types or the solvency of a certain group of market participants. Differences in haircut trends (smooth patterns versus cliff effects) might arise in different market segments (e.g. bilateral versus tri-party), suggesting higher risks.

The information about re-use of the collateral (4.14, 6.14 and 8.10) and the reinvestment rate (6.16 for securities lending) would support the assessment of the systemic leverage associated with such market practices. The re-use of collateral might limit collateral scarcities but also foster build-up of leverage in the financial system. In case of financial stress, collateral re-use might reduce the protection provided with increasing risk of runs due to clients' uncertainty about the re-hypothecation of unencumbered assets. Finally, the re-use of collateral potentially increases the interconnectedness among counterparties and sectors of the financial system, due to the chain of transactions.[43]

[43] Additional insights on the "re-use" and "reinvestment rate" elements may be provided by the on-going FSB work on the possible harmonisation of regulatory approaches to re-hypothecation of client assets.

## 6. Next steps

This document issued for public consultation sets out the proposed standards and processes for global securities financing data collection and aggregation. The FSB will revise the standards and processes in light of the consultation findings and finalise them in 2015. During this process, it also plans to consider the possible addition of supplementary data elements that would enhance authorities' financial stability monitoring and policy responses with specific focus on the following three areas:

(i) *Transactions that are economically equivalent to repos, securities lending and margin lending (economically equivalent transactions)* - Economically equivalent transactions to those defined in Section 2 may include synthetic structures (i.e. a combination of transactions)[44] as well as transactions traded under different master agreements than those listed in Section 2. When considering the potential addition of these transactions, it is important to note that OTC derivative transactions are already or will be subject to reporting to TRs in FSB members' jurisdictions. In most cases, national/regional authorities have access to the relevant data and the FSB itself is working on the aggregation of OTC derivatives trade repository data at the global level.[45] In this respect, the FSB may leverage on the relevant data initiatives to develop standards and methodologies for the identification of economically equivalent derivative transactions in the existing reporting framework.

(ii) *Data needed to calculate metrics of collateral velocity* – The August 2013 Report suggested that measures of "collateral velocity", defined as the number of times a piece of collateral changes hands, may be developed and data elements to calculate such metrics may be collected. Such data collection will help authorities' identification of financial stability risks arising from the re-use of collateral (e.g. pro-cyclicality, leverage and interconnectedness) and any policy responses to addressing these risks.

(iii) *Data related to the implementation of the regulatory framework for haircuts on non-centrally cleared securities financing transactions* – The FSB published a regulatory framework for haircuts on non-centrally cleared securities financing transactions, including numerical haircut floors, in October 2014.[46] It also stated that the details of how it will monitor implementation of the regulatory framework will be defined by the second quarter of 2015. Depending on the monitoring process, essential data to monitor the implementation of the regulatory framework may be included in the scope of global data collection and aggregation.

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[44] Such synthetic transactions could include OTC derivative products such as swaps, futures and forwards. For example, synthetic repos are structured as combinations of cash and derivative instruments that achieve the same legal and economic result as a repo, e.g. total return swap (TRS) or fully funded swaps (FFS) when the underlying asset is actually transferred to the counterparty.

[45] http://www.financialstabilityboard.org/wp-content/uploads/r_140919.pdf.

[46] http://www.financialstabilityboard.org/wp-content/uploads/r_141013a.pdf.

In finalising the standards and processes, the FSB thinks it essential to continue its discussion with market participants to ensure the practicality of the global data collection and aggregation process, including the potential additional elements.

The FSB will also develop a timeline for the implementation of the global data collection and aggregation by the end of 2015. Before initiating the official data collection and aggregation, the FSB believes conducting a pilot exercise with a significant number of reporting jurisdictions may be beneficial in helping authorities to identify any inconsistencies and imprecisions in the standards, as well as quality or comparability issues in the data collected by national/regional authorities. The final template for national/regional authorities to use in their reporting of aggregates to the FSB will be defined after the pilot exercise.

Finally, the FSB will work on the possibility of sharing aggregated data with relevant parties with legitimate policy needs as appropriate and on the potential publication of meaningful aggregates on the global securities financing markets, without impinging on data confidentiality issues. The publication of such aggregated data would improve transparency in the securities financing markets and contribute to the overall financial stability.

***Q6-1. Are there any relevant practical issue related to the possible extension of the list of data elements to be considered as set out in Section 6?***

***Q6-2. Are there other data elements in relation to securities financing transactions that you think the FSB should consider for financial stability purposes?***

***Q6-3. Do you agree that a pilot exercise should be conducted before launching the new reporting framework? If so, are there any practical suggestions that the FSB and national/regional authorities should consider when preparing the pilot exercise?***

***Q6-4. In your view, what level of aggregation and frequency for the publication of the globally aggregated data on securities financing transactions by the FSB would be useful? Please provide separate answers for repo, securities lending and margin lending if necessary.***

# Annex 1: Recommendations for improving market transparency in the August 2013 Report[47]

Recommendation 2: Trade-level (flow) data and regular snapshots of outstanding balances (position/stock data) for repo markets should be collected. Regular snapshots of outstanding balances should also be collected for securities lending markets and further work should be carried out on the practicality and meaningfulness of collecting trade-level data. Such data should be collected frequently and with a high level of granularity, and should also capitalise on opportunities to leverage existing data collection infrastructure that resides in clearing agents, central securities depositories (CSDs) and/or central counterparties (CCPs). National/regional authorities should decide the most appropriate way to collect such data (for example through trade repositories), depending on their market structure, and using existing data collection processes and market infrastructure where appropriate. Trade repositories are likely to be an effective way to collect comprehensive repo and securities lending market data. Regulatory reporting may also be a viable alternative approach.

Recommendation 3: The total national/regional data for both repos and securities lending on a monthly basis should be aggregated by the FSB which will provide global trends of securities financing markets (e.g. market size, collateral composition, haircuts, tenors). The FSB should set standards and processes for data collection and aggregation at the global level to ensure consistent data collection by national/regional authorities and to minimise double-counting at the global level.

[47] http://www.financialstabilityboard.org/wp-content/uploads/r_130829b.pdf

## Annex 2: An example of the use of TRs as the main source of data (European Commission legislative proposal)[48]

On 29 January 2014, the European Commission adopted a proposal for a Regulation on reporting and transparency of securities financing transactions in the EU. It would require that securities financing transactions are reported to a trade repository (TR). The proposal is subject to negotiation and adoption by the EU Member States and the European Parliament. Subject to their agreement, the obligation to report securities financing transactions to a TR would enter into force 18 months after the adoption of the Regulation.

The main elements of the proposed Regulation, specific to reporting to trade repositories, are:

(i) *Transactions scope* - Securities financing transactions include repurchase or reverse repurchase transactions, lending or borrowing of securities and commodities, and any transaction having an equivalent economic effect and posing similar risks, in particular buy-sell back or sell-buy back transactions.

(ii) *Reporting entities* - Any EU financial or non-financial entity, including EU branches of foreign entities, would be required to report (e.g. banks, brokers, funds, insurance companies, pension funds, other financing companies and non-financial companies). The European System of Central Banks, the Bank for International Settlements and EU public bodies managing public debt would be exempt from the reporting obligation.

(iii) *Access to data reported to TRs* - Supervisors and regulators responsible for financial stability and securities markets would have access to the data, according to their mandate. These include the European Securities and Markets Authority (ESMA), the European System of Central Banks, the European Systemic Risk Board, the European Banking Authority, the European Insurance and Occupational Pensions Authority and the relevant authorities. The proposal also contains provisions to enable third country regulators and supervisors to access the data subject to certain conditions.

(iv) *Operational issues and supervision* - TRs are already authorised and supervised by ESMA under the reporting framework for derivative contracts established by the European Market Infrastructure Regulation. The reporting of securities financing transactions would be based on this existing framework and work in a similar way. ESMA would develop specific technical standards on reporting procedures and formats, access to data procedures and registration procedures for TRs. The proposal also includes provisions to recognise third country TRs subject to certain conditions.

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[48] Proposal for a Regulation of the European Parliament and of the Council on reporting and transparency of securities financing transactions, COM(2014)40final, 29.1.2014 (http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014PC0040&from=EN).

# Annex 3: Data on repos for financial stability purposes(*)

| *Financial stability monitoring focus* | *Sector of the reporting entity* | *Counterparty type* | | *Market segment* | | *Repo rate* | *Principal amount* | *Residual Maturity* | | *Currency* | | *Collateral* | | | *Collateral management* | *Re-use* | *Hair-cut* | *Collateral market value* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | *sector* | *jurisdiction* | *trading* | *clearing* | | | *loan* | *collateral* | *cash* | *collateral* | *type* | *quality* | *jurisdiction of issuer* | | | | |
| Degree of rollover risk and vulnerability to runs or fire sales on the market or a specific<br>- market segment<br>- asset type<br>- counterparty | | x | x | x | x | | x | x | x | x | x | x | x | x | x | x | | x |
| Interconnectedness of repo market participants (cross border and cross sector activities) | x | x | x | | | | x | x | x | | | | | x | x | x | | |
| Concentration of total repo exposure | x | x | x | x | x | | x | | | | | | | | | | | |
| Concentrations of exposure to a specific asset class/quality | | x | x | | | | x | | | | | x | x | x | x | | | |
| Size of the repo market (total and by segment) – snapshot and trend over time | | | | x | x | | x | x | x | | | | | | x | | | |
| Collateral composition of market (total and by segment) – snapshot and trend over time – and degree of potential for fire sales | | | | | x | | x | | x | | | x | x | x | | | | x |
| Easing/tightening of funding terms for a specific asset class and counterpart type over time (i.e. global increases in rates, spreads or haircuts) | | x | x | | | x | x | x | x | | | | x | | | | x | |
| Maturity profile and mismatches of the overall market (original as well as remaining maturity perspective) | | | | | | | x | x | x | | | | | | | | | |

| *Financial stability monitoring focus* | *Sector of the reporting entity* | *Counterparty type* | | *Market segment* | | *Repo rate* | *Principal amount* | *Residual Maturity* | | *Currency* | | *Collateral* | | | *Collateral management* | *Re-use* | *Hair-cut* | *Collateral market value* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | *sector* | *jurisdiction* | *trading* | *clearing* | | | *loan* | *collateral* | *cash* | *collateral* | *type* | *quality* | *jurisdiction of issuer* | | | | |
| Degree of leverage in the repo market | | | | | | | x | | | | | | | | | | x | |
| Degree of currency mismatch | | | | | | | x | | | x | x | | | | | | | |
| Degree of haircuts volatility | | | | | | | | | | | | | | | | | x | |
| Degree of collateral re-use | | | | | | | | x | | | | | | | | x | | |

(*) The table is based on the August 2013 Report (Annex 2), with the additional data elements detailed in Section 2.1.1.

# Annex 4: Data on securities lending for financial stability purposes(*)

| *Financial stability monitoring focus* | *Sector of the reporting entity* | *Counterparty type* | | *Market segment* | | *Security lent/borrowed* | | *Securities lending fee or rebate rate* | *Cash reinvestment rate* | *Residual Maturity* | | *Currency* | | *Collateral* | | | *Collateral management* | *Re-use* | *Hair-cut* | *Collateral market value* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | *sector* | *jurisdiction* | *trading* | *clearing* | *type* | *amount* | | | *loan* | *collateral* | *loan* | *collateral* | *type* | *quality* | *jurisdiction of issuer* | | | | |
| Degree of rollover risk and vulnerability to runs or fire sales on the market or a specific<br>- market segment<br>- asset type<br>- counterparty | | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | | x |
| Interconnectedness of securities lending market participants (cross border and cross-sector activities) | x | x | x | | | | x | | | x | x | | | | | x | x | x | | |
| Concentration of total securities lending exposure | x | x | x | x | x | | x | | | | | | | | | | | | | |
| Concentrations of exposure to a specific asset class/quality | | x | x | | | x | x | | | | | | | x | x | x | x | | | |
| Size of the securities lending (total and by segment) – snapshot and trend over time | | | | x | x | x | x | | | x | x | | | | | | x | | | |
| Collateral composition of market (total and by segment) – snapshot and trend over time – and degree of potential for fire sales | | | | | x | | | | | | x | | | x | x | x | | | | |
| Easing/tightening of funding terms for a specific asset class over time (i.e. global increases in rates, spreads or haircuts) | | x | x | | | x | x | x | | x | x | | | | x | | | | x | |

| *Financial stability monitoring focus* | *Sector of the reporting entity* | *Counterparty type* | | *Market segment* | | *Security lent/borrowed* | | *Securities lending fee or rebate rate* | *Cash reinvestment rate* | *Residual Maturity* | | *Currency* | | *Collateral* | | | *Collateral management* | *Re-use* | *Hair-cut* | *Collateral market value* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | *sector* | *jurisdiction* | *trading* | *clearing* | *type* | *amount* | | | *loan* | *collateral* | *loan* | *collateral* | *type* | *quality* | *jurisdiction of issuer* | | | | |
| Maturity profile of the overall market (original as well as remaining maturity perspective) | | | | | | | | | | x | x | | | | | | | | | |
| Degree of leverage in the securities lending market | | | | | | x | x | | | | | | | | | | | | x | |
| Degree of currency mismatch | | | | | | | | | | | | x | x | | | | | | | |
| Degree of haircuts volatility | | | | | | | | | | | | | | | | | | | x | |
| Degree of collateral re-use | | | | | | | | | | | x | | | | | | | x | | x |

(*) The table is based on the August 2013 Report (Annex 6), with the additional data elements detailed in Section 2.1.2.

# Annex 5: Data on margin lending for financial stability purposes(*)

| *Financial stability monitoring focus* | *Client* | | *Loan rate* | *Outstanding loan* | *Customer short position* | *Residual Maturity* | | *Currency* | | *Collateral* | | | *Collateral management* | *Re-use* | *Margin requirement* | *Collateral market value* | *Free credit balances* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *sector* | *jurisdiction* | | | | *loan* | *collateral* | *loan* | *collateral* | *type* | *quality* | *jurisdiction of the issuer* | | | | | |
| Degree of rollover risk and vulnerability to runs or fire sales on the market or a specific<br>- asset type<br>- counterparty | x | x | x | x | | x | x | x | x | x | x | x | x | x | | x | |
| Interconnectedness of margin lending participants (cross border activities) | x | x | | x | | x | x | | | | | x | x | x | | | |
| Concentration of total margin lending exposure | x | x | | x | | | | | | | | | | | | | |
| Concentrations of exposure to a specific asset class/quality | | | | x | | | | | | x | x | x | x | | | | |
| Size of the margin lending (total and by segment) – snapshot and trend over time | | | | x | | x | x | | | | | | x | | | | |
| Collateral composition of market (total and by segment) – snapshot and trend over time – and degree of potential for fire sales | | | | | | | x | | | x | x | x | | | | | |
| Easing/tightening of funding terms for a specific asset class over time (i.e. global increases in rates, spreads or haircuts) | x | x | x | x | | x | x | | | | x | | | | x | | |
| Maturity profile of the overall market (original as well as remaining maturity perspective) | | | | | | x | x | | | | | | | | | | |
| Degree of leverage in the margin lending market | | | | x | x | | | | | | | | | | x | | x |

| *Financial stability monitoring focus* | *Client* | | *Loan rate* | *Outstanding loan* | *Customer short position* | *Residual Maturity* | | *Currency* | | *Collateral* | | | *Collateral management* | *Re-use* | *Margin requirement* | *Collateral market value* | *Free credit balances* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *sector* | *jurisdiction* | | | | *loan* | *collateral* | *loan* | *collateral* | *type* | *quality* | *jurisdiction of the issuer* | | | | | |
| Degree of currency mismatch | | | | | | | | x | x | | | | | | | | |
| Degree of haircuts volatility | | | | | | | | | | | | | | | | | |
| Degree of collateral re-use | | | | | | x | | | | | | | | x | | x | |

(*) The table is based on the data elements detailed in Section 2.1.3.