

Transforming Shadow Banking into Resilient Market-based Finance

**Standards and processes for global securities financing
data collection and aggregation**

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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 (repurchase agreements).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).

Securities financing transactions (SFTs) such as securities lending and repos play a crucial role in supporting price discovery and secondary market liquidity for a variety of securities. They are central to financial intermediaries' market-making activities as well as to their investment and risk management strategies. However, such transactions can also be used by market participants to take on leverage as well as engage in liquidity and maturity transformation. An enhanced data collection on securities financing markets is needed for authorities to obtain more timely and comprehensive visibility into trends and developments in these markets.

Based on the recommendations in the August 2013 Report, a FSB Data Experts Group (hereafter DEG) was established to develop standards and processes for global data collection and aggregation on SFTs 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, repos, and margin lending based on granular information collected at the national/regional level. The standards and processes also include recommendations for data collection procedures for national/regional authorities that should help minimise potential problems in global aggregates, such as double-counting.²

The FSB issued the proposed standards and processes for public consultation on 13 November 2014.³ Consultation responses were received from more than 20 respondents including trade associations representing securities borrowers and lenders, intermediaries in the securities lending and repo markets, asset managers, market infrastructure providers and individuals.⁴

This document sets out the finalised standards and processes for global securities financing data collection and aggregation for reporting of aggregates by national/regional authorities to the FSB as well as recommendations to national/regional authorities related to the collection

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 SFTs, 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).

³ <http://www.financialstabilityboard.org/wp-content/uploads/Global-SFT-Data-Standards-Consultative-Document.pdf>

⁴ The responses are published on the FSB website (<http://www.financialstabilityboard.org/2015/02/public-responses-to-the-november-2014-proposed-standards-and-processes-for-global-securities-financing-data-collection-and-aggregation/>).

of data from market participants. It defines the *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 (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 authority to the global aggregator (second tier), to ensure the quality of global aggregates and the efficiency of the reporting framework (Section 3). Six *recommendations* to national/regional authorities are set out in Section 4, the purpose of which is to allow for consistency among national/regional data and to make it possible 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 a timeline for the implementation of the global data collection. The FSB recognises that new market practices may evolve over time and will consider including such new practices within the scope of its data collection as appropriate.

In finalising the standards and processes, the FSB analysed the consultation responses received and worked closely with securities financing market participants through its DEG. The FSB wishes to thank those who have taken the time and effort to share their views. The finalised standards and processes also include additional data elements that are needed to monitor the implementation of the FSB framework for haircuts on non-centrally cleared SFTs and its consistency across jurisdictions.⁵ The DEG has furthermore leveraged other initiatives such as the FSB definition of a common data template for global systemically important banks (G-SIBs).⁶ The collection of data on SFTs has also been included as a component of the Recommendation II.5 in the second phase of the G20 Data Gaps Initiative.⁷ Where possible, duplications among similar international data collections have been avoided.

⁵ http://www.financialstabilityboard.org/wp-content/uploads/SFT_haircuts_framework.pdf

⁶ This initiative is developing a common data template to collect from G-SIBs data relevant for financial stability analyses. Partial data on SFTs 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_12032811.pdf and the latest progress report at http://www.financialstabilityboard.org/wp-content/uploads/r_140506.pdf).

⁷ Recommendation II.5 focuses on data collection on shadow banking. See the IMF – FSB “Financial Crisis and Information Gaps - Sixth progress report on the implementation of the G-20 Data Gaps Initiative” (<http://www.financialstabilityboard.org/2015/09/the-financial-crisis-and-information-gaps-2/>).

2. Data elements and granularity

2.1. Data elements for financial stability

The identification of data elements and the definition of a minimum granularity is the necessary first step to create the meaningful global SFT aggregates to inform authorities in their financial stability monitoring and policy responses. In this regard, the August 2013 Report identified an initial list of key data elements in relation to repos and securities lending operations. This initial list (see Table 1 below) has been complemented with additional elements that are also relevant for financial stability purposes (see Sections 2.3 and 2.4 for the full list of data elements for repos and securities lending, and Section 2.5 for additional elements related to margin lending).

Table 1 – Securities financing data elements 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 complemented by a comprehensive dictionary of data definitions (metadata) and reporting guidelines to enable effective and consistent global aggregation during the implementation of the global data collection. In addition to (i) the set of data elements for global aggregation purposes, the FSB 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 2 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 SFTs 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 SFTs 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 SFTs 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, securities lent and borrowed). Since the standards and processes are developed for the FSB member jurisdictions, a two-side reporting scheme, where both counterparties report the trade, would maximise the data collection coverage.⁸ Indeed, a one-side reporting scheme for repos would not capture a reverse repo between a reporting party 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 SFTs introduces double-counting as data from the same transaction could be reported twice (See Section 3.1.2 describing a “locational” approach to identify the reporting population and Section 3.3 on how to address double-counting).

Transactions executed with central banks are excluded from the data reporting scope at the global level as well as internal transactions in which both counterparties are part of the same legal entity. Intra-group transactions between different legal entities (banks or other subsidiaries) or between foreign branches and their parent company should be included, according to the “locational” approach.

2.3. Repurchase agreement and sell/buy back transactions

A *repurchase agreement (repo)* is a contractual 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

⁸ 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 should be based on one-side reporting because of the characteristics of these transactions and the nature of the intermediary-client relationship.

on a specified future date or on demand (“open” or extendable repos).⁹ A *repo* is viewed from the perspective of the provider of the collateral and cash taker. The transaction is called a *reverse repo* when viewed from the perspective of the collateral taker and cash provider.

Repos include not only classic repos,¹⁰ but also sell/buy back transactions. Sell/buy backs are economically similar transactions to classic repo but are typically documented as two legally independent transactions for the spot and the forward legs, which makes it more difficult to legally enforce margin calls and exercise the right of substitution of the collateral.¹¹ 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.¹²

Repos include transactions conducted under bespoke repo agreements and 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, Japanese Master Agreement on the Transaction with Repurchase Agreement of the Bonds, etc., Contrato Marco de compraventa y Reporto de valores, and Clearing House Rules (for example, Fixed Income Clearing Corporation - FICC).

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 traded over a certain period of time) should 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 traded during the reporting period.¹³ By 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 specific classification (e.g. underlying

⁹ “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.

¹⁰ In 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.

¹¹ 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.

¹² 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.

¹³ The reporting guidelines (see Section 2.1) will provide details 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.

collateral types, counterparties). The collection and aggregation of position/stock data includes separate reporting of both legs of the SFT.

Table 2 lists the recommended flow 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 the recommended stock data elements for both reverse repos and repos, including sell/buy back transactions (hereafter “repos”).

The reporting of position/stock 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 those that are loan related will facilitate the reporting of collateral pools for repos managed at the portfolio level.

In this data collection framework, the definitions of repos and data elements in Tables 2, 3, and 4 are consistent with the August 2013 Report, while some differences can be found with the terminology commonly used in master agreements. In the August 2013 Report, a security delivered in a repo transaction is considered “collateral” while in most master agreements it is defined as “object of purchase”. Furthermore, in the August 2013 Report the “haircut” is defined as a percentage discount, deducted from the market value of a delivered security (referred to as “object of purchase” in master agreements) in order to calculate the purchase price. This is based on the common idea that a repo is broadly similar to a collateralised loan and, in an economic sense, securities delivered function as collateral in a repo transaction.

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

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

Element	Definitions
2.1. Reporting period	The month in which the trade date for a transaction falls.
2.2. Number of transactions traded during the reporting period	The number of transactions traded in the reporting period.
2.3. Original maturity	<p>Maturity buckets of transactions traded in the period (in calendar days):</p> <ul style="list-style-type: none"> • Open or continuing terms contracts for which no maturity date is specified • Overnight, including 1-day term trades or longer that mature the next business day • from 2 days to 1 week • from over 1 week to 1 month • from over 1 month to 3 months • from over 3 to 12 months • more than 1 year

Element	Definitions
2.4. Currency	All currencies are reported, using ISO 4217 currency code (three letter code such as USD, GBP, EUR, JPY).
2.5. Principal amount	The amount of cash provided for transactions traded in the reporting period, in millions of USD. ¹⁴

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	<ul style="list-style-type: none"> • Repo and sell/buy back operations • Reverse repo and buy/sell back operations whose spot leg date is equal or earlier than the reference date and whose forward leg is later than the reference date.
3.3. Sector of the reporting party to a trade	<p>The reporting party is the cash taker for repo or sell/buy back operations and the cash provider for reverse repo or buy/sell back operations.</p> <p>The sector classification is based on the System of National Accounts (SNA) definitions and consistent with other FSB initiatives (e.g. the GSIBs common data template) as much as possible:</p> <ul style="list-style-type: none"> • Banks (SNA: deposit-taking corporations) • Broker-dealers and investment firms • MMFs • ETFs • REITs • CCPs • Other investment funds • Other financial corporations¹⁵ • Insurance/re-insurance corporations¹⁶ • Pension funds, retirement, charitable, and non-profit

¹⁴ At the national/regional level, the principal amount may be reported in the currency of denomination. Data to be reported at the global level should then be converted in USD, for example by the authority in charge of the collection. The implementation guidelines will provide further details as necessary.

¹⁵ 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.

¹⁶ The classification of insurance companies may be revised in the implementation of the FSB framework of numerical haircut floors. For example, if national/regional authorities exclude insurance companies subject to regulatory capital and liquidity requirements and that have access to central bank facilities from the application of numerical haircut floors, they may be classified separately.

Element	Definitions
3.4. Market segment – trading	<p>accounts</p> <ul style="list-style-type: none"> • General government (transactions with central banks are excluded) • Non-financial corporations (including public non-financial corporations, large corporate and small-medium enterprises) and other sectors
3.5. Market segment – clearing	<p>Transactions:</p> <ul style="list-style-type: none"> • centrally cleared or • not centrally cleared
3.6. Counterparty sector	<p>See “3.3 Sector of the reporting party to a trade” for the classification.</p> <p>In the case of centrally cleared transactions, the counterparty sector is reported as “CCP”.</p>
3.7. Counterparty jurisdiction	<p>Jurisdiction where the counterparty operates based on a pure locational approach as described in Section 3.1.2.</p> <p>For centrally cleared transactions, the jurisdiction of CCP is reported.</p> <p>All counterparty jurisdictions are reported, using ISO 3166 country codes (two letter code such as US, UK, JP). If materiality thresholds apply, jurisdictions below the thresholds are classified into a category “others”.</p>
3.8. Residual maturity	<p>See “2.3 Original maturity” in Table 2.</p> <p>For “evergreen” contracts, the residual maturity is based on the minimum notice period.</p> <p>For repos with a put, maturity is based on the first day the put can be exercised.</p>
3.9. Repo rate	<p>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.</p> <p>In case the interest rate is floating (e.g. based on a benchmark), the repo rate is the sum of the benchmark rate plus spread as of the reference date.</p> <p>As a starting point, 0.1% increments are recommended, with a final calibration of globally consistent buckets to be agreed upon by national/regional authorities.¹⁷</p>

¹⁷ In case national authorities require additional buckets, they should still allow for the calculation of the buckets requested at the global level. For example, they may decide to split the 0 – 0.1 bucket into 0 – 0.05 and 0.05 – 0.1 but may not use a 0.05 – 0.15 bucket, to allow for consistent buckets in the global aggregates.

Element	Definitions
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. In the case of centrally cleared transactions, pre-novation amount is reported.

Table 4: Data elements related to *reverse repos* and *repos* – collateral stock data¹⁸

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 party to a trade	See “3.3 Sector of the reporting party to a trade” 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 <ul style="list-style-type: none"> • by a tri-party agent or • 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 re-use eligibility	Whether collateral is eligible for re-use: <ul style="list-style-type: none"> • Yes • No Re-use of collateral means any use of assets received as collateral by the collateral taker.
4.9. Collateral type	The collateral actually allocated at the reference date (it is also applicable for cases such as callable bonds, tri-party substitutions and other forms of collateral turnover) are classified into the following collateral types: <ul style="list-style-type: none"> • Government securities¹⁹ • Supra-nationals and agencies securities²⁰

¹⁸ CCPs’ initial and variation margining requirements should not be included.

¹⁹ Government securities are defined as claims on sovereigns under the Basel III standardised approach. This includes claims on: central governments (and their central banks); certain non-central government public sector entities (PSEs) identified as sovereigns in the standardised approach; multilateral development banks (MDBs) that meet the criteria for a 0% risk-weight under the standardised approach; the Bank for International Settlements (BIS); the International Monetary Fund (IMF); the European Central Bank (ECB); and the European Union (EU).

²⁰ This includes agency-sponsored securitisation where they benefit from an explicit agency guarantee.

Element	Definitions
	<ul style="list-style-type: none"> • Debt securities (including covered bonds) issued by banks and other financial institutions • Corporate debt securities (including covered bonds) issued by non-financial institutions • Securitised products • Main index equities (including convertible bonds) • Other equities (including convertible bonds) • Other assets (including shares in mutual funds), excluding cash²¹
4.10. Collateral quality	Debt securities are split into: <ul style="list-style-type: none"> • Investment grade²² • Non-investment grade • Non-rated
4.11. Collateral currency	Currency of denomination of collateral assets. All currencies are reported, using ISO 4217 currency code (three letter code such as USD, GBP, EUR and JPY).
4.12. Collateral residual maturity	Non-cash collateral other than equities is classified into the following maturity buckets: <ul style="list-style-type: none"> • below 1 month • more than 1 month and up to 3 months • more than 3 months and up to 1 year • more than 1 year and up to 5 years • more than 5 and up to 10 years • more than 10 year
4.13. Jurisdiction of the issuer of the underlying security	See “3.7 Counterparty jurisdiction” in Table 3. 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.
4.14. Haircut	Report actual haircut (cash investor margin levels) on non-centrally cleared transactions with 0.5% increments. ²³
4.15. Collateral market value	Gross market value of the collateral in millions of USD, as of the reference date in 4.1.

²¹ Additional details on the classification will be provided in the implementation guidelines as necessary.

²² According to external ratings (e.g. securities rated Baa or higher by Moody’s and BBB or higher by Standard and Poor’s or equivalent ratings by other agencies), including external credit assessment institutions (ECAI) recognised as eligible by national/regional supervisors. If there are two or more assessments by ECAs chosen by reporting institution which map into different collateral quality (i.e. investment grade and non-investment grade), the lowest rating should be considered.

²³ The 0.5% increments allow for monitoring of the application of the FSB regulatory framework for haircuts on non-centrally cleared SFTs.

2.4. Securities lending

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, 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 there might be other types of firms operating as securities lending agents.

Securities lending includes transactions conducted under bespoke securities lending agreements and 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 Master Agreement on Lending Transaction of Bonds, Japanese Master Agreement on the Borrowing and Lending Transactions of Share Certificates, etc., and Clearing House Rules.²⁴

Collateral upgrade/downgrade transactions should be included so long as they are conducted under the master agreements listed above.

Tables 5 and 6 define the proposed securities lending data elements, with separate tables for loans and for 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. A separate table 7 sets out additional data elements on securities lending (e.g. cash collateral reinvestment) not directly reported in the loan and collateral tables.²⁵

²⁴ 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.

²⁵ Some data elements, such as “5.2 - Type of contract” or “5.12.a Securities lending fee/premium” could be unavailable to borrowers. The national/regional guidelines should consider those cases and provide instructions on how and what to report.

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. Type of contract	<ul style="list-style-type: none">• Exclusive²⁶• Non-exclusive
5.3. Position	<ul style="list-style-type: none">• Securities lending• Securities borrowing including all open positions as of the reference date.
5.4. Sector of the reporting party to a trade	See "3.3 Sector of the reporting party to a trade" in Table 3. The reporting party is the lender in case of securities lending and the borrower in case of securities borrowing. ²⁷
5.5. Market segment – trading	See "3.4 Market segment - trading" in Table 3.
5.6. Market segment – clearing	See "3.5 Market segment - clearing" in Table 3.
5.7. Counterparty sector	See "3.6 Counterparty sector" in Table 3.
5.8. Counterparty jurisdiction	See "3.7 Counterparty jurisdiction" in Table 3.
5.9. Type of security lent or borrowed	Asset class as categorised in element "4.9 Collateral type" of Table 4.
5.10. Residual maturity	See "2.3 Original maturity" in Table 2. Calculated with reference to the maturity date of the securities loan.
5.11. Currency	See "2.4 Currency" in Table 2. The currency to be reported is that of the securities on loan if position (5.3) is securities lending and of borrowed securities if position is securities borrowing.

²⁶ In this arrangement the lender or its agent negotiates an exclusive arrangement with a borrowing counterparty. The borrower pays a set upfront fee for exclusive access to borrow from the lender's securities portfolio.

²⁷ If, at national/regional level, an agent reports on behalf of the securities lender and/or borrower, this element should represent the sector of the lender in case of securities lending and that of the borrower in case of securities borrowing.

Element	Definitions
5.12. a. Securities lending fee/premium (<i>if collateral is non-cash</i>)	Securities lending fee: fee/premium that the borrower of the security pays to the lender when the securities loan is backed by non-cash collateral. For trades conducted under exclusive agreements, securities lending fee is not requested.
b. Rebate rate (<i>if collateral is cash</i>)	Rebate rate: is the rate agreed to by the borrower and the lender (or agent on lender's behalf) when the securities loan is backed by cash collateral. In markets where rebate rate is not used, other rates indicating the price of the securities lending transaction collateralised by cash are reported. ²⁸ As a starting point, 0.1% increments are recommended (including negative values) for both securities lending fee/premium and rebate rate, with a final calibration of buckets to be agreed upon by national/regional authorities.
5.13. Amount of securities lent or borrowed	Market value of the securities on loan or borrowed in millions of USD, on a gross basis, as of the reference date in 5.1.

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 "5.3 Position" above in Table 5.
6.3. Sector of the reporting party to a trade	See "3.3 Sector of the reporting party to a trade" in Table 3.
6.4. Market segment – clearing	See "3.5 Market segment - clearing" in Table 3.
6.5. Collateral management	See "4.5 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 re-use eligibility	See "4.8 Collateral re-use eligibility" in Table 4.
6.9. Collateral type	The collateral actually allocated at the reference date (it is also applicable for cases such as callable bonds, tri-party substitutions and other forms of collateral turnover) is classified as : <ul style="list-style-type: none"> • Cash collateral or other collateral types listed in item 4.9 in Table 4.

²⁸ In some jurisdictions, securities lending fee and cash rate are paid separately for a securities loan backed by cash collateral instead of using rebate rate. In such cases, securities lending fee and cash rate should be reported separately.

Element	Definitions
6.10. Collateral quality	See “4.10 Collateral quality” in Table 4. “Collateral quality” is not requested for transactions collateralized by cash.
6.11. Collateral currency	See “4.11 Collateral currency” in Table 4.
6.12. Collateral residual maturity	See “4.12 Collateral residual maturity” in Table 4.
6.13. Jurisdiction of the issuer of the collateral	See “3.7 Counterparty jurisdiction” in Table 3.
6.14. Haircut	See “4.14 Haircut” in Table 4.
6.15. Collateral market value	See “4.15 Collateral market value” in Table 4, as of the reference date in 6.1.

Table 7: Data elements related to *securities lending and borrowing on cash collateral reinvestments*²⁹

Element	Definitions
7.1. Reference date	See "3.1 Reference date" in Table 3.
7.2. Sector of the reporting party to a trade	See “3.3 Sector of the reporting party to a trade” in Table 3.
7.3. Counterparty sector	See “3.6 Counterparty sector” in Table 3.
7.4. Counterparty jurisdiction	See “3.7 Counterparty jurisdiction” in Table 3.
7.5. Collateral currency	See “4.11 Collateral currency” in Table 4.
7.6. Cash reinvestment rate	It is calculated as the average interest rate received on cash collateral reinvestment. If rate is floating (e.g. based on a benchmark), the sum of the benchmark rate plus the spread as of the reference date is reported.
7.7. Cash collateral reinvestment	The total amount of cash collateral reinvested, in millions of USD, is split into: <ul style="list-style-type: none"> • registered money market fund (MMF) • any other commingled pool (COM) • the repo market (REPO) • a direct purchase of securities (DIR) • other

²⁹ It is possible that the data elements included in this table can only be reported by agent lenders. The implementation guidelines would provide more details on the reporting requirements.

2.5. 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. The securities serving as collateral are held in margin accounts and are often re-hypothecated by financial institutions to fund the loans provided and eventually may 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 SFT data at the global level, the FSB would only focus on margin lending provided to non-retail clients as it may pose risks to financial stability similar to those of repos and securities lending.

The relationship between financial institutions and their clients typically includes various types of trading activities not limited to SFTs but also comprising short sales of securities and trading of derivatives. The process for determining the collateral for each client may apply across the range of these transactions and may include consideration of the credit risk of the client as well as the risks 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 transaction involves the temporary exchange of assets, namely the provision of cash secured against collateral;
- margin lending allows financial institutions to create “collateralised” short-term liabilities; and
- each type of transaction creates leverage as well as facilitates maturity and liquidity transformation.³⁰

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 standardised 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 interests and rights of the security provided as collateral, while margin lending only provides the financial institution with the right to re-hypothecate the collateral, although this ability to re-hypothecate may be restricted by contract or regulation. However, once the collateral has been re-hypothecated, then the financial institution has the same

³⁰ 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).

obligation as under a repo or securities lending transaction to return “equivalent securities” to the client.

The inclusion of margin lending transactions in the scope of its global SFT data collection and aggregation is essential for a full consideration of risks deriving from SFTs, as margin lending has 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.

The collection of data for margin lending nevertheless necessitates the compilation of specific tables for this transaction type (see Tables 8 – 10 below). Most data elements for margin lending are similar to those requested for repo and securities lending, in which case the definitions in previous Tables are referenced.

Table 8a: Data elements related to *margin lending* – loans stock data

Element	Definitions
8a.1. Reference date	See "3.1 Reference date" in Table 3.
8a.2. Sector of the reporting party to a trade	<ul style="list-style-type: none"> • Bank • Broker-dealers and investment firm
8a.3. Sector of the client	See “3.6 Counterparty sector” in Table 3.
8a.4. Jurisdiction of the client	See “3.7 Counterparty jurisdiction” in Table 3.
8a.5. Loan currency	See “2.4 Currency” in Table 2.
8a.6. Residual maturity of the outstanding loans	See “2.3 Original maturity” in Table 2 for the maturity buckets proposed for reporting.
8a.7. Loan rate	<p>In case of floating rate, the sum of benchmark rate and spread is reported according to buckets to be decided.</p> <p>As a starting point, 0.1% increments are recommended, with a final calibration to be agreed by national/regional authorities.</p>
8a.8. Amount of outstanding loans	Total amount of loans (excluding short sale proceeds) in millions of USD.

Table 8b: Data elements related to *margin lending* – free credit balances and short market values

Element	Definitions
8b.1. Reference date	See "3.1 Reference date" in Table 3.
8b.2. Sector of the reporting party to a trade	<ul style="list-style-type: none"> • Bank • Broker-dealers and investment firm
8b.3. Sector of the client	See “3.6 Counterparty sector” in Table 3.

Element	Definitions
8b.4. Jurisdiction of the client	See “3.7 Counterparty jurisdiction” in Table 3.
8b.5. Free credit balances	Total amount of net cash credit balances, excluding short sale proceeds, if any, in millions of USD. ³¹
8b.6. Short market value	Market value of short position, if any, in millions of USD, as of the reference date in 8b.1.

Table 9: Data elements related to *margin lending* – collateral portfolios

Element	Definitions
9.1. Reference date	See "3.1 Reference date" in Table 3.
9.2. Sector of the client	See “3.6 Counterparty sector” in Table 3.
9.3. Jurisdiction of the client	See “3.7 Counterparty jurisdiction” in Table 3.
9.4. Collateral re-use eligibility	See “4.8 Collateral re-use eligibility” in Table 4.
9.5. Collateral type	See “6.9 Collateral type” in Table 6.
9.6. Collateral quality	See “4.10 Collateral quality” in Table 4.
9.7. Jurisdiction of the issuer of the collateral	See “3.7 Counterparty jurisdiction” in Table 3.
9.8. Currency of the collateral	See “2.4 Currency” in Table 2.
9.9. Collateral residual maturity	See “4.12 Collateral residual maturity” in Table 4.
9.10. Margin requirement ³²	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, 1% increments are recommended, with a final calibration of buckets to be agreed upon by national/regional authorities.
9.11. Collateral market value	Total market value of collateral as of the reference date in 9.1.

³¹ In some jurisdictions this data element could prove difficult to be reported (e.g. where data are collected via trade repositories). In these cases, some flexibility would be allowed until alternative data collection mechanisms are devised.

³² The margin requirement is inherently different from the haircut for repo and securities lending (4.13 and 6.14). Specifically, in a prime brokerage relationship, the margin applied to the collateral portfolio held in a client’s prime brokerage account reflects the level of financing the prime broker is willing to provide to the client. Margin is calculated based on each prime broker’s proprietary margin methodology, which accounts for a number of factors, and it cannot be directly linked to a specific piece of collateral in the portfolio.

Table 10: Data elements related to *margin lending* – funding sources of the financial institution

Element	Definitions
10.1. Reference date	See "3.1 Reference date" in Table 3.
10.2. Funding sources	<p>The following funding sources for financing client margin lending are considered:</p> <ul style="list-style-type: none"> • Repo (including sell/buy back) • Cash collateral from securities lending • Free credits³³ • Proceeds from customer short sales • Proceeds from broker short sales • Unsecured borrowing • Other
10.3. Market value of funding sources	<p>Market value of funding source balances in millions of USD as of the reference date in 10.1.</p> <p>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 is suggested as an appropriate estimate.</p>

³³ Liabilities of a broker-dealer to customers subject to immediate cash payment on demand (i.e. the amount of a particular funding source a broker has to provide its client).

3. Data architecture

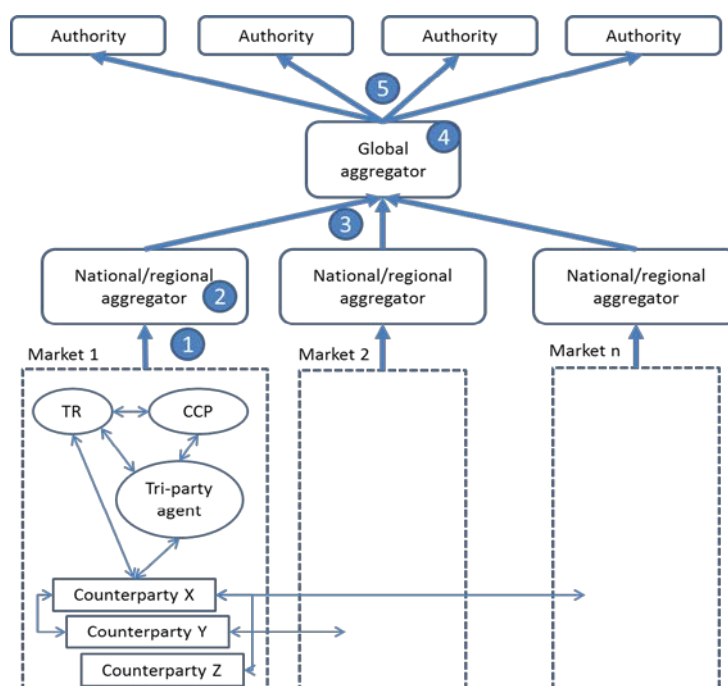
This section describes the recommended standards and processes in relation to data architecture that should ensure: (i) the maximum consistency in the data collection by national/regional authorities; (ii) removal of double-counting at the national/regional and global level; (iii) the adequate distribution 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 authorities³⁴ should collect data frequently and with a high level of detail. This recommendation also states 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, the total national/regional data aggregated by national/regional authorities on a monthly basis should be further aggregated by the FSB which will provide global trends of securities financing markets.

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 should take place in each jurisdiction and would encompass:

³⁴ This should include supervisory authorities, central banks and other government bodies who are responsible for implementing a national/regional data collection as a member of FSB.

- (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 due to transactions reported by two entities within the jurisdiction and compilation of aggregates that are consistent with Section 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 the relevant information from the FSB to the relevant authorities and to the general public as appropriate.

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.³⁵ The second tier should follow a single harmonised approach to limit issues in the compilation of global aggregates and enhance the comparability of 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 undermine the elimination of double-counting are also described. National/regional authorities are asked to consider these issues as appropriate when developing the data collection process at the national/regional level.

The second part contains a discussion of legal and operational issues related to the global data collection and aggregation process (Section 3.2). Data confidentiality is discussed, including the rules by which various authorities and institutions should have access to all or part of the data according to their mandate. The potential distribution of non-confidential aggregates to the general public is also considered.

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

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 SFTs. However, a wide divergence in the

³⁵ In addition, the harmonisation of national/regional approaches is desirable to reduce the reporting burden for reporting institutions active in multiple jurisdictions.

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, consistent definitions of data elements are recommended 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 meaningful 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 collect the data elements described in Section 2 through at least three main sources:

- (i) Bilateral counterparties in a trade;
- (ii) Trading venues, securities settlement systems, CCPs and tri-party agents; and
- (iii) Trade repositories (TRs), which could provide the authorities with access to transaction level data provided by counterparties.

The three sources are not mutually exclusive and the preferred approach to collect the data 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 related to the trading and post-trading of SFTs (e.g. trading venues, CCPs). If the counterparties often use agents to conduct the transactions (e.g. agent lenders in securities lending transactions), the national/regional authorities may decide that the information should be collected directly from such agents rather than from the counterparties. In such cases, data for global aggregates should not include characteristics of data provider (e.g. its jurisdiction and sector), but those of counterparties to a trade.

When the counterparties of the trades are the preferred source of data, authorities may wish to verify that all the data elements requested from the national/regional data collection and for the calculation of global aggregates are available to reporting institutions. For example, for transactions secured by baskets of collateral, timely and detailed information on the composition of those baskets are usually maintained by tri-party systems or electronic trading platforms, and counterparties may need to obtain such information from those service providers in order to report to national/regional authorities.

The second approach would be for the national/regional authority to collect 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.³⁶ However, relying exclusively on this source would lead to not covering 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 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 EU³⁷). The responsible authorities could then access the data stored in TRs, classify deals and counterparties, and compile national data for global aggregates. 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 calculate appropriate national/regional aggregates (i.e. that transactions can be regionally assigned).

Any of these approaches discussed above are suitable for 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 should be addressed by the national/regional authorities responsible for compiling the data (see Section 3.3).

3.1.2 Reporting population

It is recommended that all counterparties and all SFTs covered by the definitions set out in Section 2 are included in the global securities financing data collection and aggregation. For the purpose of reporting, securities financing activity or transactions within the jurisdiction should be defined according to a pure locational approach (i.e. SFTs conducted by entities located within that jurisdiction).

This means that national/regional authorities should select in the reporting population resident entities (i.e. registered in the jurisdiction), including foreign owned subsidiaries and branches.³⁸ For example, securities borrowing by a Tokyo branch of an US financial institution should be included in the securities financing activity figure for Japan and not that of the US. This approach avoids duplications with transactions reported by other jurisdictions,

³⁶ Potential sources for detailed data could also be other market infrastructures like trading platforms and settlement systems.

³⁷ See Annex 2 for details.

³⁸ The possibility to assign an LEI to branches of foreign institutions is under consideration of the LEI Regulatory Oversight Committee (see the “Consultation document on including data on branches in the Global LEI System” http://www.lei.org/publications/gls/lou_20151019-1.pdf).

and allows authorities to monitor the national/regional implementation of the FSB framework for haircuts on non-centrally cleared SFTs through the FSB process. Also, the locational approach does not require reporting parties to identify the ultimate owner of their counterparties (i.e. there is no need to identify relationships between market participants).

The reporting population should include not only banks but also non-banks. Capturing non-bank to non-bank transactions, even if they are currently a fraction of transactions involving banks, is important in detecting new developments in the market as well as in monitoring the implementation of the FSB framework for haircuts on non-centrally cleared SFTs.

If national/regional authorities adopt a broader reporting scope than the pure locational approach (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.

If a national/regional authority decides to cover a subset of counterparties representative of its market (e.g. collecting only transactions above a certain threshold on transaction size and/or omitting transactions conducted by counterparties with annual activity or size of total assets smaller than a certain amount), the methodology for exclusion of targeted transactions or counterparties should be transparent and communicated to the FSB.³⁹ National/regional authorities should confirm that the reporting population is comprehensive, highly representative of the respective securities financing markets and defined on a pure locational approach as described above.

3.1.3 *Granularity of the data*

National/regional authorities may collect data with various degrees of granularity, but they should at least collect the items set out in Section 2 for consistent aggregation purposes.

National/regional authorities may collect more granular data (e.g. with a counterparty-by-counterparty or security-by-security detail), or more aggregate data grouping more than a single counterparty or a single security (i.e. position level data or portfolio level data).

In both cases, national/regional data should be aggregated according to the consistent set of data elements and level of detail described in Section 2, to support the compilation of global aggregates and 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 asked to send the aggregates to the FSB. This classification of the data requires the extraction of certain unique identifiers

³⁹ If difficulties arise at national/regional level in requiring local branches of foreign institutions to report or national/regional authorities determine either that such activity is insignificant or is not cost-effective to collect, the FSB recommends including those branches with substantial activity. Each jurisdiction would determine the level of activity that would be considered substantial.

such as LEI or ISIN and characteristics⁴⁰ 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 may have to create reference databases to be able to associate the codes reported by market participants⁴¹ with the requested classifications (e.g. sector and jurisdiction of the counterparty, or asset type and quality of the collateral).

While a centralised approach should produce consistent and reliable classifications, a drawback may be the higher cost of establishing and maintaining the reference databases that 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 would assign the classifications before sending the data to the national/regional authorities, with potential inconsistencies and duplication of efforts. Reporting entities may also be asked to aggregate the transactions by their characteristics, according to the categories requested in Section 2 or by national/regional authorities, and report those aggregated data to the national/regional authorities.

Under this approach, national/regional authorities might need to verify that the same classification scheme is applied consistently by all reporting entities.

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

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 should 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 would 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.

⁴⁰ For example, residence of LEI and its business sector, or issue date and rating of a security.

⁴¹ For example, LEI for the identification of market participants or ISIN for the securities.

3.2.1 *Legal issues*

The national/regional authorities would need to 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 appropriate parties. Since data transmitted by national/regional authorities to the FSB should be aggregated and with no identification of individual counterparties or positions, some potential legal constraints may be minimised. However, there may remain legal obstacles since 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 appropriate parties (see Section 3.2.3 on confidentiality issues).

In addition to the above mentioned limitation on sharing securities financing data, it is possible that legal restrictions may also present problems in data collection (e.g. in some cases establishments of foreign firms are not allowed to disclose counterparty names to the host authority).

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.

Authorities should also consider alternatives that may be available to them. For example, an alternative may be a voluntary framework through a multilateral memorandum of understanding (MMoU) between an authority and relevant parties, to obtain the necessary approvals or authorisations to share the appropriate aggregates with the FSB and potentially with appropriate authorities.

3.2.2 *Operational issues*

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 and develop technical solutions for storing and treating the data by the global aggregator. A framework for distributing the relevant information to appropriate authorities and, potentially, to the public should also be defined.

3.2.3 *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. 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 (e.g. other authorities), according to their mandate, but not disclosed to the general public;
- (iii) *Confidential* data, where counterparties could be potentially identified (e.g. when only one market participant is operating in a jurisdiction) should not be shared at all.

Governance arrangements would specify the process by which data are classified as restricted versus confidential (see Sections 3.2.5 and 6). These arrangements may also address how other parties should have access to the data and the level of aggregation to which each would have access.⁴²

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) should have the same treatment as reported data and should prevent any disclosure of the data not intended to be disseminated. Rules should also be defined to manage potential changes in the confidentiality of input data during the periods covered by certain time series.

3.2.4 Access to data on SFTs

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

As a reference, the FSB and other standard setting bodies have previously analysed the issue of access to data in relation to OTC derivatives transactions in the CPSS-IOSCO report on *Authorities' access to trade repository data* (hereafter the "CPSS-IOSCO Report").⁴³ The CPSS-IOSCO report sets out a model for considering 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 various TRs will be of interest for a number of authorities with diverse mandates. On the other hand, in the case of SFTs, there may not be a similar reporting obligation. 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

⁴² In some cases, confidentiality requirements could result in national/regional authorities providing to the FSB data with lower granularity than expected. This situation should be avoided, when possible, since it could limit the removal of double-counting for cross-border deals and negatively affect the quality of the global aggregates.

⁴³ <http://www.bis.org/cpmi/publ/d110.pdf>

information stored in the central hub.⁴⁴ 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 SFTs submitted to the global aggregator and described in this document would be considered aggregate-level data.

The FSB will set up a governance group as a subgroup of DEG which would assess and define access rights in detail (see Section 3.2.5 and 6), 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 may 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. In addition to periodic reporting, ad-hoc requests for information could be fulfilled, according to rules developed in the governance framework. Some aggregate-level data could be regularly made public by the FSB.

3.2.5 Governance

In order to ensure a robust data aggregation process at the global level (second tier of global data collection and aggregation), defining robust 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 at the end of 2015 (see Section 6). 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;

⁴⁴ Other area that could be of relevance to SFTs is on the access to data maintained by national/regional authorities.

- 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
- determining if and to what extent issues in the local data collections create obstacles for the global aggregation, in coordination with a data requirement group also established by the FSB at the end of 2015 (see Section 6).

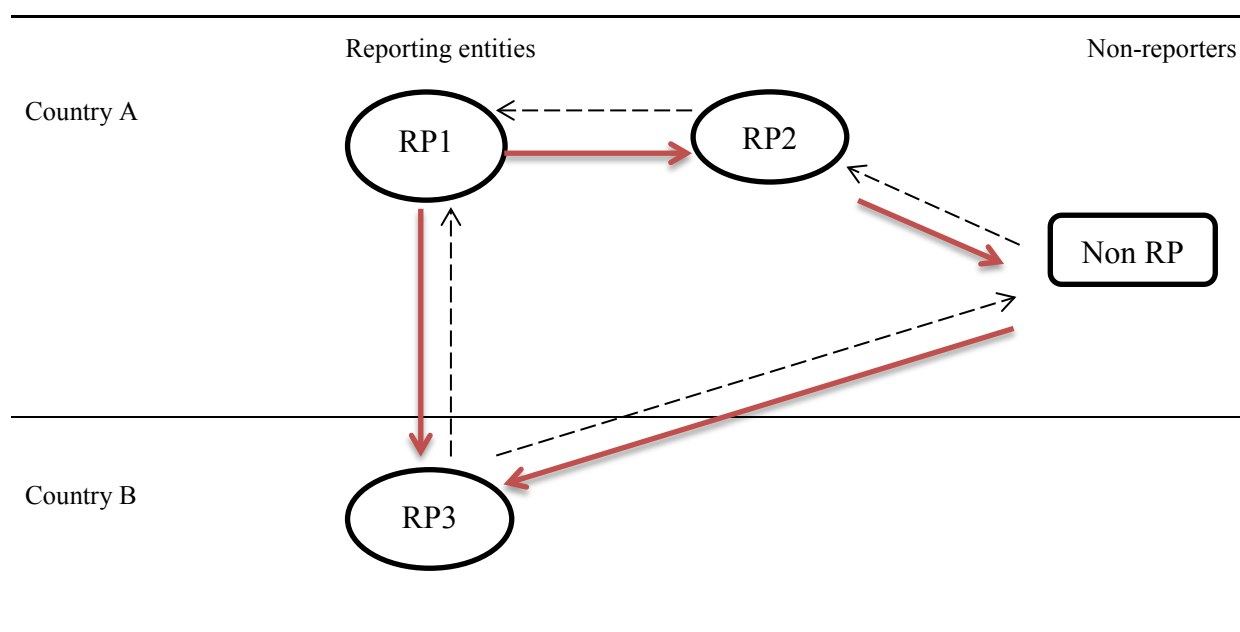
3.3. Double-counting

As highlighted above, national/regional authorities will be asked 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 SFTs, the same transaction may be reported twice, by both the lender and the borrower (if both are required to report), 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 by the national/regional authority to report (Exhibit 2). The problems as well as the possible solutions could also apply to a regime in which SFT data are reported to a TR.

Exhibit 2 – Illustration of double-counting



In the example, there are three reporting and one non-reporting entities (e.g. a non-financial corporations or a government). Transactions between reporting entities will be double counted, while transactions between a reporting and non-reporting party 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 party 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 party 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 with 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 party and non-reporting party 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 activity⁴⁵ and the BIS semi-annual OTC derivatives statistics⁴⁶.

⁴⁵ <http://www.bis.org/publ/rpfx13.htm>.

⁴⁶ <http://www.bis.org/statistics/derstats.htm>.

- *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 parties will belong to each reporting entity. If the granular approach is adopted, the national/regional aggregator would be asked to identify the counterparties reporting status.

Considering the reporting entities RP1 to RP3 as described in Exhibit 2, the table below provides a detailed illustration how double-counting removal procedure may be applied.

Table 11 – Solutions to double-counting

Counterparties	Jurisdictions	Double-counting?	Solution	Comment
1. RP1 and RP2 (both reporting parties)	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 parties)	A	No	-	No double-counting in national/regional report.
3. RP1 and RP3 (cross-border transaction between reporting parties)	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 parties)	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, a bias can be introduced if reporting entities provide incomplete data or classify transactions in different ways. For example:

- Reporting entities do not provide the full amount of the cross-border transactions between reporting entities due to a national/regional reporting threshold, while their counterparty does not apply any threshold or a different one.
- Reporting entities tend to use “other” or “unallocated” elements when classifying transaction into aggregates, while their counterparty classifies the same transaction in any other bucket.

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

4. Recommendations for national/regional data collections

National/regional authorities should consider the standards and processes outlined in this document as a recommended minimum 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:

1. **National/regional data standards**, while reflecting the specific features of the local markets, **should be consistent with the data elements, granularity level and definitions provided in this document**. High quality and complete information should be collected by national/regional authorities and aggregated for the FSB.
2. 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 two months after the reference date.⁴⁷ Revisions, if any, to the prior month data should be submitted promptly. 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.
3. In order to allow for international comparability and consistent aggregation at the global level, **the reporting population at the national/regional level should be as comprehensive as possible**. If national/regional authorities choose to exclude certain entities or portfolios from national/regional reporting, they should ensure that the reporting population is highly representative of the respective securities financing markets **in order to mitigate the impact on the overall quality of the data collected** so that international comparability and consistent aggregation are ensured at the global level. National/regional authorities should inform the FSB about the rationale and criteria / thresholds for such exclusion of insignificant entities or portfolios.
4. **National/regional authorities should define an appropriate reporting 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.

⁴⁷ At a first stage this lag (which includes the time needed for national authorities to collect data from reporting entities and to check their quality as well as for the FSB to provide the global aggregates) could be increased by some weeks. The FSB could then consider when the shorter lag targeted in this recommendation is feasible, considering the implementation of automated procedures in reporting jurisdictions.

5. 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.
6. **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.

5. Use of data

The data elements described in Section 2 should be considered a minimum set necessary to derive meaningful global aggregates that will help inform authorities in their financial stability monitoring and policy responses.⁴⁸ In order to derive 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, useful to assess spill-overs and other vulnerabilities in the financial system. The proposed additional data elements should 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 should provide for a better comparison of trends across products, counterparty sectors or jurisdictions to identify potential imbalances.

This Section explains 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 would 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 may 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 as appropriate.⁴⁹

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*,⁵⁰ to monitor systemic risks originating from financial market infrastructures (FMIs) such as payment and settlement systems, CCPs and TRs,⁵¹ that are involved in repos or related collateral activities.

5.1. Flow data

Flow data on reverse repo are needed to assess trends in size and numbers of new transactions. Information on currency and maturity of the new loans and on the number of transactions (Table 2) would help monitor turnover in the repo market and assess market shifts to contracts

⁴⁸ Authorities will also utilise other appropriate data/information in their financial stability monitoring and policy responses as necessary.

⁴⁹ 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.

⁵⁰ <http://www.bis.org/cpmi/publ/d101a.pdf>.

⁵¹ See the CPSS-IOSCO Report (<http://www.bis.org/cpmi/publ/d110.pdf>).

with different characteristics. It could also support the assessment of whether differences in levels of or changes in market activity in various jurisdictions are linked to market structural factors. This data would also support the analysis of market freezes/pullbacks in case of financial stress.

5.2. Loan stock data

The aggregate information on the sector and jurisdiction of the reporting parties to a trade (data elements 3.3, 5.4 and 8a.2)⁵² 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, 5.7 and 8a.3) and jurisdiction (3.7, 5.8 and 8a.4) 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 5.5, and clearing mechanisms – 3.5 and 5.6) 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, 5.10) is important for monitoring the trend towards longer or shorter-term funding. Expanding short-term repo positions increases 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, 5.11 and 8a.5), associated with the sector (3.6, 5.7 and 8a.3), jurisdiction of the counterparty (3.7, 5.8 and 8a.4) as well as the sector of the reporting party (3.3, 5.4 and 8a.2), would provide an assessment of the potential build-up of aggregated liquidity risk in certain currencies (e.g. for 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), securities lending fee and rebate rate (5.12a and b) 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.

⁵² 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 stock data

The information on collateral type (4.9, 6.9 and 9.5) and quality (4.10, 6.10 and 9.6) 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 calculated from 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 (4.11, 6.11 and 9.8), paired with the currency of the related loans, would allow for 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 residual maturity of the collateral (4.12, 6.12 and 9.9), 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 (4.13, 6.13 and 9.7; to be reported only for securities) would be helpful to assess cross-border interconnections and the associated risks. It may 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 (4.14 and 6.14) would help in assessing the evolution of the potential build-up of leverage in the financial system through securities financing. It would also help in monitoring the implementation of the new FSB regulatory framework for haircuts on non-centrally cleared SFT, 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.⁵³

Crossing the haircuts with breakdowns by “collateral type”, “collateral quality”, “jurisdiction of collateral issuer”, “sector of the reporting party to a trade” and “sector of the counterparty”

⁵³ 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.

may 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 versus rapid changes) might arise in different market segments (e.g. bilateral versus tri-party), suggesting higher risks.

The information on collateral re-use eligibility (4.8, 6.8, 9.4) could allow securities markets liquidity monitoring as well as the identification of market failures due to collateral being not eligible for re-use. For example, in stressed market conditions fluctuations of collateral eligible for re-use may significantly impact market liquidity.

The information about cash reinvestment rate (7.6) would support the assessment of the systemic impact of leverage associated with securities lending. Firms have incentives to borrow cash under securities lending agreements when the reinvestment rate is high relative to short-term market rates, creating leverage.

Finally, information of funding sources (10.2 and 10.3) would help identify the availability of different sources for financing client margin lending in periods of stress and to understand the extent to which different funding sources are substitutable.

6. Next steps

Based on the final standards and processes for global securities financing data collection and aggregation as set out in this document, the FSB will start working on the detailed operational arrangements to initiate the official data collection and aggregation. In this regard, the FSB has developed a timeline for implementing the global data collection and aggregation.

(i) By the end of 2015

- Take stock of existing national/regional plans and timelines for collecting securities financing data within their jurisdictions that is consistent with the FSB global data standards.
- Establishment of two subgroups under the DEG – Governance group and Data Management group – that will comprise, respectively, legal and data experts from the relevant FSB members. The Governance group will work on issues associated with the governance of the data collection. Such issues include: definition of the legal framework under which the data would be shared and transmitted to the global aggregator, and from the global aggregator to other parties; identification of legal obstacles for collecting and sharing aggregate securities financing data at global level as well as consideration of their solutions; assessment of confidentiality issues; development of the rules of access to the aggregate-level data; and consideration of publishing selected aggregated data.

Meanwhile, the Data Management group will work on technical issues to operationalise the global securities financing data collection and aggregation. The technical issues include: definition of the template for national/regional authorities to report to the global aggregator; determination of the technical format (DSD - data structure definition) and channels for data transmission to the global aggregator; identification of the codes for classification; development of the detailed guidelines and definitions; and preparation of pilot exercises in coordination with national/regional authorities to verify that the whole process is working properly.

(ii) In 2016

- Completion of the work of Governance and Data Management groups (by Q3 2016).
- Creation of a timetable for the start of reporting to the global data aggregator. This timetable should be based on the stock-take of national/regional data collection plans.

(iii) In 2017-18

- Pilot exercise(s) to be conducted to ensure smooth implementation.⁵⁴
- Launch of the global data aggregator's operations.
- Start of reporting by national/regional authorities to the global data aggregator. This will help ensure implementation of the FSB framework for numerical haircut floors on non-centrally cleared SFTs by the end of 2018.

In preparing the implementation of the global data collection and aggregation in accordance with the above timelines, the FSB thinks it essential to continue its discussion with market participants to align the global data collection, where appropriate, to existing national/regional/international data standards.

In addition, the FSB will continue to work on developing possible measures of “collateral velocity” (including the collateral re-use measurement) and identifying appropriate data elements for deriving these measures with the aim to integrate such data elements into the global data standards. Recommendations on this issue would be developed by the end of 2016, leveraging on the WS5 Re-hypothecation and re-use Experts Group (REG) work on the potential financial stability issues associated with collateral re-use and on further consultation with the industry.⁵⁵

⁵⁴ Given the complexity of the data collection, it is possible that multiple pilot exercises may be needed (e.g. exercises based on a survey of major market participants and exercises based on actual reported data before the official launch of the global data hub). These pilot exercises should identify potential operational bottlenecks and issues, in particular issues related to the elimination of double-counting and the reporting of meaningful national/regional aggregates for further aggregation at the global level.

⁵⁵ <http://www.financialstabilityboard.org/wp-content/uploads/Progress-Report-on-Transforming-Shadow-Banking-into-Resilient-Market-Based-Financing.pdf>

Annex 1 - Recommendations for improving market transparency in the August 2013 Report

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.

Annex 2 - An example of the use of TRs as the main source of data: the EU reporting framework for SFTs

The European Parliament adopted a Regulation on transparency of securities financing transactions and of re-use in the EU on 29 October 2015.⁵⁶ It will require that SFTs are reported to a trade repository (TR). Depending on the category of the reporting entity, the reporting will start at different stages from 12 to 21 months after the entry into force of the relevant technical standards, i.e. between mid-2018 and mid-2019.

The main elements of the Regulation, specific to reporting to TRs, are:

- (i) *Transactions scope* - SFTs include repurchase or reverse repurchase transactions, lending or borrowing of securities and commodities, buy-sell back or sell-buy back transactions and margin lending 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 small and medium-sized non-financial companies' transactions will be reported by their financial counterparties. 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 as well as any transaction to which a member of the European System of Central Banks is a counterparty.
- (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 Regulation 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 SFTs is based on this existing framework and works in a similar way. ESMA will develop within one year after the entry into force of the Regulation specific technical standards on reporting procedures and formats, access to data procedures and registration procedures for TRs. The Regulation also includes provisions to recognise third country TRs subject to certain conditions.

⁵⁶ See http://europa.eu/rapid/press-release_IP-15-5930_en.htm. The Regulation is expected to enter into force by the end of 2015 after its adoption by the European Council. The text follows the agreement reached between the European Parliament and the European Council on 17 June 2015 (<http://data.consilium.europa.eu/doc/document/ST-10197-2015-INIT/en/pdf>).

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

Financial stability monitoring focus	Sector of the reporting party	Counterparty type		Market segment		Repo rate	Principal amount		Residual Maturity		Currency		Collateral			Collateral management	Haircut	Collateral Market value	Collateral re-use
		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 - market segment - asset type - counterparty		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										
Degree of leverage in the repo market							x									x		x	
Degree of currency mismatch							x			x	x								
Degree of haircuts volatility																x			

(*) The table is based on the August 2013 Report (Annex 2), with the additional data elements detailed in Section 2.3.

Annex 4 - Data on securities lending for financial stability purposes ^(*)

Financial stability monitoring focus	Sector of the reporting party	Counterparty type		Market segment		Security lent/borrowed		Securities lending fee or rebate rate	Cash reinvestment rate	Residual Maturity		Currency		Collateral			Collateral management	Haircut	Collateral market value	Collateral re-use
		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 - market segment - asset type - counterparty		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	
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					
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											x	x								

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

(*) The table is based on the August 2013 Report (Annex 6), with the additional data elements detailed in Section 2.4.

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	Margin requirement	Collateral market value	Free credit balances	Collateral re-use
	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 - asset type - counterparty	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 margin lending (total & by segment) – snapshot & trend over time				x		x	x					x					
Collateral composition of market (total and by segment) – snapshot and trend over time – & 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	x	
Degree of currency mismatch								x	x								
Degree of haircuts volatility																	

(*) The table is based on the data elements detailed in Section 2.5.